分 冊

Separate Volume

出願番号 特願2003-102207

[ST.10/C]: [JP2003-102207]

分冊番号 4/9



Cys Gln Asp Gln Ser Ile Phe His Ser Lys Ile Lys Gln Asn Ser Phe 25 30 20 Pro Val Ile Thr Ser Tyr Pro Ser Val Ser Lys Leu Pro Leu Ser Phe 35 40 45 Leu His Arg Ala His Phe Lys Thr Cys Phe Ala Ala Phe Ser Leu Cys 55 60 50 Val Leu Val Asp Ala Asn Leu Pro Pro Ala Leu Arg Lys Ala Glu Lys 65 70 75 80 His Glu Arg Pro Gln Glu Ala Pro Gly Leu Gly Glu Pro Gln Ala Gly 85 90 95 Thr Leu Ala Gly Gln Trp Leu Gly Ser Arg Ala Ala Gly Thr Leu Leu 100 105 110 Ala Gly Arg Gly Ser Cys Ser Arg Glu Ala Gln Arg Pro His Gly Leu 115 120 125 Ala Trp Thr Glu Met Glu Asn Arg Trp Glu Lys Arg Met Gly Ile Ser 130 135 140

<210> 3306

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3306

Met Ala Ala Glu Ala Lys Gly Trp Gly Cys Arg Leu Pro Ser Cys Cys

1 5 10 15

Pro Cys Pro Cys Lys Thr Gly Asp Pro Gly Pro Gly Asn Arg Arg Arg

20 25 30

Ala Thr Pro Met Trp Met Pro Lys Gly Pro Thr Gln Glu Arg Cys Arg

45 35 40 Pro Tyr Pro Pro Pro Leu Pro Gly Met Ile His Ala Pro Ala Arg Glu 50 55 60 Gly Lys Asn Leu Pro Ala Pro Leu Pro Leu Gly Ser Ser Gly Leu Tyr 70 75 65 80 Pro Gly Lys Lys Glu Val Ala Asp Ser Val Thr Glu Ile Arg Leu Arg 90 95 85 Asp Pro Leu Ser Ala Pro Ala Leu Arg Leu Gly Arg Ser Gln Leu Cys 100 105 110 Pro Val Trp Val Arg His Pro Val Pro Leu Cys Cys Phe Ser Ala Ser 115 120 125 Asp Leu Gly Leu Phe Leu Ser Pro Gly Ser His Pro

140

135

<210> 3307

130

<211> 576

<212> PRT

<213> Homo sapiens

<400> 3307

Met Glu Glu Lys Asn Gln Ala Val Cys His Asp Tyr Asp Ile His Phe

1 5 10 15

Tyr Pro Thr Phe Arg Tyr Phe Lys Ala Phe Thr Lys Glu Phe Thr Thr
20 25 30

Gly Glu Asn Phe Lys Gly Pro Asp Arg Glu Leu Arg Thr Val Arg Gln
35 40 45

Thr Met Ile Asp Phe Leu Gln Asn His Thr Glu Gly Ser Arg Pro Pro 50 55 60

Ala	Cys	Pro	Arg	Leu	Asp	Pro	Ile	Gln	Pro	Ser	Asp	Val	Leu	Ser	Leu
65					70					75					80
Leu	Asp	Lys	Arg	Gly	Ser	His	Tyr	Val	Ala	Ile	Val	Phe	Glu	Ser	Asn
				85					90					95	
Ser	Ser	Tyr	Leu	Gly	Arg	Glu	Val	Ile	Leu	Asp	Leu	Ile	Pro	Tyr	Glu
			100				-	105					110		
Ser	Ile	Val	Val	Thr	Arg	Ala	Leu	Asp	Gly	Asp	Lys	Ala	Phe	Leu	Glu
		115					120					125			
Lys	Leu	Gly	Val	Ser	Ser	Val	Pro	Ser	Cys	Tyr	Leu	Ile	Tyr	Pro	Asn
	130					135				-	140				
Gly	Ser	His	Gly	Leu	Ile	Asn	Val	Val	Lys	Pro	Leu	Arg	Ala	Phe	Phe
145					150					155					160
Ser	Ser	Tyr	Leu	Lys	Ser	Leu	Pro	Asp	Val	Arg	Lys	Lys	Ser	Leu	Pro
				165					170					175	
Leu	Pro	Glu	Lys	Pro	His	Lys	Glu	Glu	Asn	Ser	Glu	Ile	Val	Val	Trp
			180					185					190		
Arg	Glu	Phe	Asp	Lys	Ser	Lys	Leu	Tyr	Thr	Val	Asp	Leu	Glu	Ser	Gly
		195					200					205			
Leu	His	Tyr	Leu	Leu	Arg	Val	Glu	Leu	Ala	Ala	His	Lys	Ser	Leu	Ala
	210					215					220				
Gly	Ala	Glu	Leu	Lys	Thr	Leu	Lys	Asp	Phe	Val	Thr	Val	Leu	Ala	Lys
225					230					235					240
Leu	Phe	Pro	Gly	Arg	Pro	Pro	Val	Lys	Lys	Leu	Leu	Glu	Met	Leu	Gln
				245					250					255	
Glu	Trp	Leu	Ala	Ser	Leu	Pro	Leu	Asp	Arg	Ile	Pro	Tyr	Asn	Ala	Val
			260					265					270		
Leu	Asp	Leu	Val	Asn	Asn	Lys	Met	Arg	Ile	Ser	Gly	Ile	Phe	Leu	Thr
		275					280					285			
Asn	His	Ile	Lvs	Trp	Val	Glv	Cvs	Gln	Glv	Ser	Arg	Ser	Glu	Leu	Arg

	290					295					300				
Gly	Tyr	Pro	Cys	Ser	Leu	Trp	Lys	Leu	Phe	His	Thr	Leu	Thr	Val	Glu
305					310					315					320
Ala	Ser	Thr	His	Pro	Asp	Ala	Leu	Val	Gly	Thr	Gly	Phe	Glu	Asp	Asp
				325					330					335	
Pro	Gln	Ala	Val	Leu	Gln	Thr	Met	Arg	Arg	Tyr	Val	His	Thr	Phe	Phe
			340					345					350		
Gly	Cys	Lys	Glu	Cys	Gly	Glu	His	Phe	Glu	Glu	Met	Ala	Lys	Glu	Ser
		355					360					365			
Met	Asp	Ser	Val	Lys	Thr	Pro	Asp	Gln	Ala	Ile	Leu	Trp	Leu	Trp	Lys
	370					375					380				
Lys	His	Asn	Met	Val	Asn	Gly	Arg	Leu	Ala	Gly	His	Leu	Ser	Glu	Asp
385					390					395					400
Pro	Arg	Phe	Pro	Lys	Leu	Gln	Trp	Pro	Thr	Pro	Asp	Leu	Cys	Pro	Ala
				405					410					415	
Cys	His	Glu	Glu	Ile	Lys	Gly	Leu	Ala	Ser	Trp	Asp	Glu	Gly	His	Val
			420					425					430		
Leu	Thr	Phe	Leu	Lys	Gln	His	Tyr	Gly	Arg	Asp	Asn	Leu	Leu	Asp	Thr
		435					440					445			
Tyr	Ser	Ala	Asp	Gln	Gly	Asp	Ser	Ser	Glu	Gly	Gly	Thr	Leu	Ala	Arg
	450					455					460				
Gly	Glu	Glu	Glu	Glu	Lys	Arg	Leu	Thr	Pro	Pro	Glu	Val	Ser	His	Gly
465					470					475					480
Asp	Arg	Asp	Thr	Gln	Ser	Val	Arg	Pro	Pro	Gly	Ala	Leu	Gly	Pro	Arg
				485					490					495	
Pro	Ala	Leu	Pro	Glu	Ser	Leu	His	His	Ser	Leu	Asp	Gly	Lys	Leu	Gln
			500					505					510		
Ser	Leu		Gly	Pro	Gly	Ala		Lys	Glu	Val	Gly		Ala	Ala	Pro
		515					520					525			

Phe Leu Gly Val Asp Phe Ser Ser Leu Asp Met Ser Leu Cys Val Val 530 535 540

Leu Tyr Val Ala Ser Ser Leu Phe Leu Met Val Met Tyr Phe Phe 545 550 550 560

Arg Val Arg Ser Arg Arg Trp Lys Val Lys His His His Pro Ala Val 565 575

<210> 3308

<211> 845

<212> PRT

<213> Homo sapiens

<400> 3308

Met Glu Lys Asn Ile Asn Leu Arg Asn Cys Gln Thr Leu Asn Thr Tyr

1 5 10 15

Val Met Leu Thr His Leu Arg Met Pro Ala Pro Ile Arg Leu Arg Glu 20 25 30

Leu Ile Arg Thr Ile Arg Thr Ala Arg Thr Gln Ala Glu Glu Arg Glu
35 40 45

Met Ile Gln Lys Glu Cys Ala Ala Ile Arg Ser Ser Phe Arg Glu Glu 50 55 60

Asp Asn Thr Tyr Arg Cys Arg Asn Val Ala Lys Leu Leu Tyr Met His
65 70 75 80

Met Leu Gly Tyr Pro Ala His Phe Gly Gln Leu Glu Cys Leu Lys Leu 85 90 95

Ile Ala Ser Gln Lys Phe Thr Asp Lys Arg Ile Gly Tyr Leu Gly Ala 100 105 110

Met Leu Leu Leu Asp Glu Arg Gln Asp Val His Leu Leu Met Thr Asn

		115					120					125			
Cys	Ile	Lys	Asn	Asp	Leu	Asn	His	Ser	Thr	Gln	Phe	Val	Gln	Gly	Leu
	130					135					140				
Ala	Leu	Cys	Thr	Leu	Gly	Cys	Met	Gly	Ser	Ser	Glu	Met	Cys	Arg	Asp
145					150					155					160
Leu	Ala	Gly	Glu	Val	Glu	Lys	Leu	Leu	Lys	Thr	Ser	Asn	Ser	Tyr	Leu
				165					170					175	
Arg	Lys	Lys	Ala	Ala	Leu	Cys	Ala	Val	His	Val	Ile	Arg	Lys	Val	Pro
			180					185					190		
Glu	Leu	Met	Glu	Met	Phe	Leu	Pro	Ala	Thr	Lys	Asn	Leu	Leu	Asn	Glu
		195					200					205			
Lys	Asn	His	Gly	Val	Leu	His	Thr	Ser	Val	Val	Leu	Leu	Thr	Glu	Met
	210					215					220				
Cys	Glu	Arg	Ser	Pro	Asp	Met	Leu	Ala	His	Phe	Arg	Lys	Leu	Val	Pro
225					230					235					240
Gln	Leu	Val	Arg	Ile	Leu	Lys	Asn	Leu	Ile	Met	Ser	Gly	Tyr	Ser	Pro
				245					250					255	
Glu	His	Asp	Val	Ser	Gly	Ile	Ser	Asp	Pro	Phe	Leu	Gln	Val	Arg	Ile
			260					265			-		270		
Leu	Arg	Leu	Leu	Arg	Ile	Leu	Gly	Arg	Asn	Asp	Asp	Asp	Ser	Ser	Glu
		275					280					285			
Ala	Met	Asn	Asp	Ile	Leu	Ala	Gln	Val	Ala	Thr	Asn	Thr	Glu	Thr	Ser
	290					295					300				
Lys	Asn	Val	Gly	Asn	Ala	Ile	Leu	Tyr	Glu	Thr	Val	Leu	Thr	Ile	Met
305					310					315					320
Asp	Ile	Lys	Ser	Glu	Ser	Gly	Leu	Arg	Val	Leu	Ala	Ile	Asn	Ile	Leu
				325					330					335	
Gly	Arg	Phe	Leu	Leu	Asn	Asn	Asp	Lys	Asn	Ile	Arg	Tyr	Val	Ala	Leu
			340					345					350		

Thr	Ser	Leu	Leu	Lys	Thr	Val	Gln	Thr	Asp	His	Asn	Ala	Val	Gln	Arg
		355					360					365			
His	Arg	Ser	Thr	Ile	Val	Asp	Cys	Leu	Lys	Asp	Leu	Asp	Val	Ser	Ile
	370					375					380				
Lys	Arg	Arg	Ala	Met	Glu	Leu	Ser	Phe	Ala		Val	Asn	Gly	Asn	Asn
385					390					395					400
Ile	Arg	Gly	Met	Met	Lys	Glu	Leu	Leu	Tyr	Phe	Leu	Asp	Ser	Cys	Glu
				405					410					415	
Pro	Glu	Phe	Lys	Ala	Asp	Cys	Ala	Ser	Gly	Ile	Phe	Leu	Ala	Ala	Glu
			420					425					430		
Lys	Tyr		Pro	Ser	Lys	Arg		His	Ile	Asp	Thr		Met	Arg	Val
		435			_		440					445	_		
Leu		Thr	Ala	Gly	Ser		Val	Arg	Asp	Asp		Val	Pro	Asn	Leu
	450					455					460				
	Gln	Leu	Ile	Thr	Asn	Ser	Val	Glu	Met		Ala	Tyr	Thr	Val	
465					470	_				475			_		480
Arg	Leu	Tyr	Lys		Ile	Leu	Gly	Asp		Ser	Gln	Gln	Pro		Val
				485	_				490			_		495	
Gln	Val	Ala		Trp	Cys	He	Gly		Tyr	Gly	Asp	Leu		Val	Ser
.			500	٥,	0.1		_	505	61	** 1		0.1	510	0.1	77 1
Gly	GIn	-	GIu	Glu	Glu	Glu		He	GIn	Val	Thr		Asp	Glu	Val
т.	Α.	515	т	C1	C.	X7 . 1	520	т 1	C.	۸	Ma 4	525 Sam	TI	C	Vol
Leu		He	Leu	Glu	Ser		Leu	He	Ser	Asn		ser	ınr	ser	vai
Œ1	530	01	Tr.	A 1	T	535	A 1	т 1	M ·	т	540	C.	TI	A	Dlag
	Arg	Gly	lyr	Ala	Leu	Ihr	Ala	He	Met		Leu	Ser	ınr	Arg	
545	0	Œ'	T 7 •		550	т.	T	.	17 ·	555		т 1	T	C1	560
Thr	Cys	Thr	Val		Arg	He	Lys	Lys		Val	Ser	He	lyr		Ser
	.	À	••	565		۵.	. .		570	77 ·	0.	T.		575	,
Ser	He	Asp	Val	Glu	Leu	Gln	Gln	Arg	Ala	Val	Glu	Tvr	Asn	Ala	Leu

			580					585					590		
Phe	Lys	Lys	Tyr	Asp	His	Met	Arg	Ser	Ala	Leu	Leu	Glu	Arg	Met	Pro
		595					600					605			
Val	Met	Glu	Lys	Val	Thr	Thr	Asn	Gly	Pro	Thr	Glu	Ile	Val	Gln	Thr
	610					615					620				
Asn	Gly	Glu	Thr	Glu	Pro	Ala	Pro	Leu	Glu	Thr	Lys	Pro	Pro	Pro	Ser
625					630					635					640
Gly	Pro	Gln	Pro	Thr	Ser	Gln	Ala	Asn	Asp	Leu	Leu	Asp	Leu	Leu	Gly
				645					650					655	
Gly	Asn	Asp	Ile	Thr	Pro	Val	Ile	Pro	Thr	Ala	Pro	Thr	Ser	Lys	Pro
			660					665					670		
Ser	Ser	Ala	Gly	Gly	Glu	Leu	Leu	Asp	Leu	Leu	Gly	Asp	Ile	Asn	Leu
		675					680					685			
Thr	Gly	Ala	Pro	Ala	Ala	Ala	Pro	Ala	Pro	Ala	Ser	Val	Pro	Gln	Ile
	690					695					700				
Ser	Gln	Pro	Pro	Phe	Leu	Leu	Asp	Gly	Leu	Ser	Ser	Gln	Pro	Leu	Phe
705					710					715					720
Asn	Asp	Ile	Ala	Ala	Gly	Ile	Pro	Ser	Ile	Thr	Ala	Tyr	Ser	Lys	Asn
				725					730					735	
Gly	Leu	Lys	Ile	Glu	Phe	Thr	Phe	Glu	Arg	Ser	Asn	Thr	Asn	Pro	Ser
			740					745					750		
Val	Thr	Val	Ile	Thr	Ile	Gln	Ala	Ser	Asn	Ser	Thr	Glu	Leu	Asp	Met
		755					760					765			
Thr	Asp	Phe	Val	Phe	Gln	Ala	Ala	Val	Pro	Lys	Thr	Phe	Gln	Leu	Gln
	770					775					780				
Leu	Leu	Ser	Pro	Ser	Ser	Ser	Ile	Val	Pro	Ala	Phe	Asn	Thr	Gly	Thr
785					790					795					800
Ile	Thr	Gln	Val	Ile	Lys	Val	Leu	Asn	Pro	Gln	Lys	Gln	Gln	Leu	Arg
				805					810					815	

Met Arg Ile Lys Leu Thr Tyr Asn His Lys Gly Ser Ala Met Gln Asp 820 825 830 Leu Ala Glu Val Asn Asn Phe Pro Pro Gln Ser Trp Gln

Leu Ala Glu Val Asn Asn Phe Pro Pro Gln Ser Irp Gln

835

840

845

<210> 3309

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3309

Met Gly Val Gly Gly Arg Glu Ala Glu Lys Arg Ala Leu Arg Thr Ser

1 5 10 15

Ser Gln Cys Phe Cys Gly Lys Trp Arg Gln Asp Gly Ser Ser Gln Arg
20 25 30

Gly Met Glu Ala Glu Ser Val Cys Trp Ser Leu Glu Ala Arg Met Leu 35 40 45

Pro Asn Thr Ala Val Pro Leu Arg Ala Ser Pro Pro Gly Arg Leu Ser 50 55 60

Pro Leu Pro Ala Cys Cys Pro His Arg Leu Arg Gly Ser Gly Gly Ala
65 70 75 80

Gly Pro Arg Pro Phe Cys Ala Cys Leu Leu Gly Arg Ser Arg Pro Glu 85 90 95

Arg Gly Ser Ala Val

100

<210> 3310

<211> 236

<212> PRT

<213> Homo sapiens

<400> 3310

Met Gly Gly Arg Val Thr Gly Gly Trp Ala Val Gly Leu Pro Asp Thr

1 5 10 15

His Pro Thr Gly Ser Pro Ala Gly Ser Pro Leu Gly Thr Thr Met Ser
20 25 30

Ala Arg Arg Met Val Gly Trp Met Tyr Trp Ser Lys Glu Gly Leu Thr
35 40 45

Asn Leu Leu Tyr Cys Leu Met Thr Pro Ser Met Ser Arg Pro Arg Ser 50 55 60

Leu Met Ser Arg Arg Ser Arg Arg Thr Arg Arg Met Ser Glu Ser Val
65 70 75 80

Ser Thr Lys Ile Phe Met Ser Arg Ser Trp Trp Arg Gln Arg Ala Ser 85 90 95

Glu Trp Pro Asp Ala Ser Ser Gly His Gly Asp Thr Gly Thr Ser Pro

100 105 110

Cys Thr Glu Ala Ala Trp Ser Val Gly Leu Ala Arg Ala Thr Ser Pro 115 120 125

Gly His Pro Gly Arg Trp Gly Gly Val Gly Arg Trp Gly Cys Leu His

130 135 140

Leu Val Leu Gly Pro Gly Pro Ser His Phe Pro Arg Ala Pro Trp Gln
145 150 155 160

Val Gly Arg Ser Gly Glu Val Gly Val Ser Gly Asp Ala Val Leu Pro 165 170 175

Val Arg Gly Leu Gly Glu Glu Ala Trp His Gly Gly Trp Leu Arg Asn 180 185 190 Gln Ala Gly Met Gly Leu Gly Thr Cys Asp Leu Leu Thr Leu Leu Gly
195

Val Thr Cys Thr Asn Thr Leu Gly Asn Gly Gly Arg Gly Glu Phe Arg
210

Val Cys Pro His Ala Gln His Thr Val Val Gly Pro
225

230

235

<210> 3311

<211> 225

<212> PRT

<213> Homo sapiens

<400> 3311

Met Arg Ile Phe Arg Gly Cys Thr Gln Pro Ser Thr Leu Gly Gln Gly

1 5 10 15

Val His Ser Pro Leu Met Lys Ala Gln Phe Ile Thr His His Ser Arg
20 25 30

Lys Gln Val Lys Pro Gly Glu Gly Trp Gly Arg Ser Ser Phe Thr Arg

40

45

Ala Cys Arg Asp His Thr Thr Ile Leu Ser Gly Asn Arg Ser Phe Ser 50 55 60

Ala Val Ala Ala Thr Pro Ala Lys His Lys His Met His Thr Arg Thr 65 70 75 80

His Thr His Met His Thr His Thr Gly Met His Thr Leu Thr Gly Thr
85 90 95

His Val His Thr Pro His Thr Gln Met His Thr Arg Ile Leu Thr Leu 100 105 110

Ser His Met His Thr His Ala His Thr His Ala His Thr His Gly His

Thr His Thr Arg Ala His Ser Thr His Ala His Thr His Ala His Ser His Tyr His Thr Arg Thr Leu Thr Leu Thr His Ser His Ala His Ser Cys Thr Leu Thr Ser Thr Ile Thr His Met His Thr His Thr His Thr His Met His Thr His Thr Ser Thr Leu Thr Arg Thr Leu Thr Leu Thr His Thr His Met His Thr Phe Leu Ser Leu Val Ser His Leu Ala Gly Tyr Ile Ser Cys Gln Phe Ile Phe Ser Ser Glu Asn Pro Arg Leu Cys His <210> 3312 <211> 1177 <212> PRT <213> Homo sapiens <400> 3312 Met Ala Gly Ile Phe Lys Glu Phe Phe Phe Ser Thr Glu Asp Leu Pro Glu Val Ile Leu Thr Leu Ser Leu Ile Ser Ser Ile Gly Ala Phe Leu Asn Arg His Leu Glu Asp Phe Pro Ile Pro Val Pro Val Ile Leu Phe

Leu	Leu	Gly	Cys	Ser	Phe	Glu	Val	Leu	Ser	Phe	Thr	Ser	Ser	Gln	Val
	50					55					60				
Gln	Arg	Tyr	Ala	Asn	Ala	Ile	Gln	Trp	Ile	Ser	Pro	Asp	Leu	Phe	Phe
65					70					75					80
Arg	Ile	Phe	Thr	Pro	Val	Val	Phe	Phe	Thr	Thr	Ala	Phe	Asp	Met	Asp
				85					90					95	
Thr	Tyr	Met	Leu	Gln	Lys	Leu	Phe	Trp	Gln	Ile	Leu	Leu	Ile	Ser	Ile
			100	•				105					110		
Pro	Gly	Phe	Leu	Val	Asn	Tyr	Ile	Leu	Val	Leu	Trp	His	Leu	Ala	Ser
		115					120					125			
Val	Asn	Gln	Leu	Leu	Leu	Lys	Pro	Thr	Gln	Trp	Leu	Leu	Phe	Ser	Ala
	130					135					140				
Ile	Leu	Val	Ser	Ser	Asp	Pro	Met	Leu	Thr	Ala	Ala	Ala	Val	Arg	Asp
145					150					155					160
Leu	Gly	Leu	Ser	Arg	Ser	Leu	Ile	Ser	Leu	Ile	Asn	Gly	Glu	Ser	Leu
				165					170					175	
Met	Thr	Ser	Val	Ile	Ser	Leu	Ile	Thr	Phe	Thr	Ser	Ile	Met	Asp	Phe
			180					185					190		
Asp	Gln	Arg	Leu	Gln	Ser	Lys	Arg	Asn	His	Thr	Leu	Ala	Glu	Glu	Ile
		195					200					205			
Val	Gly	Gly	Ile	Cys	Ser	Tyr	Ile	Ile	Ala	Ser	Phe	Leu	Phe	Gly	Ile
	210					215					220				
Leu	Ser	Ser	Lys	Leu	Ile	Gln	Phe	Trp	Met	Ser	Thr	Val	Phe	Gly	Asp
225					230					235					240
Asp	Val	Asn	His	Ile	Ser	Leu	Ile	Phe	Ser	Ile	Leu	Tyr	Leu	Ile	Phe
				245					250					255	-
Tyr	Ile	Cys	Glu	Leu	Val	Gly	Met	Ser	Gly	Ile	Phe	Thr	Leu	Ala	Ile
			260					265					270		
Val	Gly	Leu	Leu	Leu	Asn	Ser	Thr	Ser	Phe	Lys	Ala	Ala	Val	Glu	Glu

		275					280					285			
Thr	Leu	Leu	Leu	Glu	Phe	Trp	Thr	Phe	Leu	Ser	Arg	Ile	Ala	Phe	Leu
	290					295					300				
Met	Val	Phe	Thr	Phe	Phe	Gly	Leu	Leu	Ile	Pro	Ala	His	Thr	Tyr	Leu
305					310					315					320
Tyr	Ile	Glu	Phe	Val	Asp	Ile	Tyr	Tyr	Ser	Leu	Asn	Ile	Tyr	Leu	Thr
				325					330					335	
Leu	Ile	Val	Leu	Arg	Phe	Leu	Thr	Leu	Leu	Leu	Met	Ser	Pro	Val	Leu
			340					345					350		
Ser	Arg	Val	Gly	His	Glu	Phe	Ser	Trp	Arg	Trp	Val	Phe	Ile	Met	Val
		355					360					365			
Cys	Ser	Glu	Met	Lys	Gly	Met	Pro	Asn	Ile	Asn	Met	Ala	Leu	Leu	Leu
	370					375					380				
Ala	Tyr	Ser	Asp	Leu	Ţyr	Phe	Gly	Ser	Asp	Lys	Glu	Lys	Ser	Gln	Ile
385					390					395					400
Leu	Phe	His	Gly	Val	Leu	Val	Cys	Leu	Ile	Thr	Leu	Val	Val	Asn	Arg
				405					410					415	
Phe	Ile	Leu	Pro	Val	Ala	Val	Ala	Ile	Leu	Gly	Leu	Arg	Asp	Ala	Thr
			420					425					430		
Ser	Thr	Lys	Tyr	Lys	Ser	Val	Cys	Cys	Thr	Phe	Gln	His	Phe	Gln	Glu
		435					440					445			
Leu	Thr	Lys	Ser	Ala	Ala	Ser	Ala	Leu	Lys	Phe	Asp	Lys	Asp	Leu	Ala
	450					455					460				
Asn	Ala	Asp	Trp	Asn	Met	Ile	Glu	Lys	Ala	Ile	Thr	Leu	Glu	Asn	Pro
465					470					475					480
Tyr	Met	Leu	Asn	Glu	Glu	Glu	Thr	Thr	Glu	His	Gln	Lys	Val	Lys	Cys
				485					490					495	
Pro	His	Cys	Asn	Lys	Glu	Ile	Asp	Glu	Ile	Phe	Asn	Thr	Glu	Ala	Met
			500					505					510		

Glu	Leu	Ala	Asn	Arg	Arg	Leu	Leu	Ser	Ala	Gln	Ile	Ala	Ser	Tyr	Gln
		515					520					525			
Arg	Gln	Tyr	Arg	Asn	Glu	Ile	Leu	Ser	Gln	Ser	Ala	Val	Gln	Val	Leu
	530					535					540				
Val	Gly	Ala	Ala	Glu	Ser	Phe	Gly	Glu	Lys	Lys	Gly	Lys	Cys	Met	Ser
545					550					555					560
Leu	Asp	Thr	Ile	Lys	Asn	Tyr	Ser	Glu	Ser	Gln	Lys	Thr	Val	Thr	Phe
				565					570					575	
Ala	Arg	Lys	Leu	Leu	Leu	Asn	Trp	Val	Tyr	Asn	Thr	Arg	Lys	Glu	Lys
			580					585					590		
Glu	Gly	Pro	Ser	Lys	Tyr	Phe	Phe	Phe	Arg	Ile	Cys	His	Thr	Ile	Val
		595					600					605			
Phe	Thr	Glu	Glu	Phe	Glu	His	Val	Gly	Tyr	Leu	Val	Ile	Leu	Met	Asn
	610					615					620				
Ile	Phe	Pro	Phe	Ile	Ile	Ser	Trp	Ile	Ser	Gln	Leu	Asn	Val	Ile	Tyr
625					630					635					640
His	Ser	Glu	Leu	Lys	His	Thr	Asn	Tyr	Cys	Phe	Leu	Thr	Leu	Tyr	Ile
				645					650					655	
Leu	Glu	Ala		Leu	Lys	Ile	Ala	Ala	Met	Arg	Lys	Asp		Phe	Ser
			660					665					670		
His	Ala		Asn	Ile	Phe	Glu		Ala	Ile	Thr	Leu		Gly	Ile	Leu
		675					680			_	_	685			٥.
His		He	Leu	He	Glu	Ile	Asp	Thr	He	Lys		He	Phe	Asn	Glu
.	690		. .			695	_			۵.	700	ъ.		. .	-
	Glu	Val	He	Val		Ile	Lys	Val	Val		Phe	Phe	Arg	He	
705	. .	.	_	_	710		_	-		715	-				720
Arg	He	Phe	Lys		He	Ala	Pro	Lys		Leu	Lys	He	He		Lys
	.,	0		725	-	m	ъ.	m	730	٥.		-	Ţ.	735	₩.
Arg	Met	Ser	His	Gln	Lys	Thr	Phe	Trp	Tyr	Gly	He	Leu	Lys	Gly	Tyr

			740					745					750		
Val	Gln	Gly	Glu	Ala	Asp	Ile	Met	Thr	Ile	Ile	Asp	Gln	Ile	Thr	Ile
		755					760					765			
Ser	Lys	Gln	Ile	Lys	Gln	Met	Leu	Leu	Lys	Gln	Val	Ile	Arg	Asn	Met
	770					775					780				
Asp	His	Ala	Thr	Lys	Glu	Leu	Gly	Tyr	Leu	Glu	Tyr	Asp	His	Pro	Glu
785					790					795					800
Ile	Ala	Val	Thr	Val	Lys	Thr	Lys	Glu	Glu	Ile	Asn	Val	Met	Leu	Asn
				805					810					815	
Met	Ala	Thr	Glu	Ile	Leu	Lys	Ala	Phe	Ser	Leu	Lys	Gly	Ile	Ile	Ser
			820					825					830		
Lys	Thr	Glu	Gly	Ala	Gly	Ile	Asn	Lys	Leu	Ile	Met	Ala	Lys	Lys	Lys
		835					840					845			
Glu	Val	Leu	Asp	Ser	Gln	Ser	Ile	Ile	Arg	Pro	Leu	Thr	Val	Glu	Glu
	850					855					860				
Val	Leu	Tyr	His	Ile	Pro	Trp	Leu	Asp	Lys	Asn	Lys	Asp	Tyr	Ile	Asn
865					870					875					880
Phe	Ile	Gln	Glu	Lys	Ala	Lys	Val	Val	Thr	Phe	Asp	Cys	Gly	Asn	Asp
				885					890					895	
Ile	Phe	Glu	Glu	Gly	Asp	Glu	Pro	Lys	Gly	Ile	Tyr	Ile	Ile	Ile	Ser
			900					905					910		
Gly	Met	Val	Lys	Leu	Glu	Lys	Ser	Lys	Pro	Gly	Leu	Gly	Ile	Asp	Gln
		915					920					925			
Met	Val	Glu	Ser	Lys	Glu	Lys	Asp	Phe	Pro	Ile	Ile	Asp	Thr	Asp	Tyr
	930					935					940				
Met	Leu	Ser	Gly	Glu	Ile	Ile	Gly	Glu	Ile	Asn	Cys	Leu	Thr	Asn	Glu
945					950					955					960
Pro	Met	Lys	Tyr	Ser	Ala	Thr	Cys	Lys	Thr	Val	Val	Glu	Thr	Cys	Phe
				965					970					975	

Ile Pr	o Lys	Thr	His	Leu	Tyr	Asp	Ala	Phe	Glu	Gln	Cys	Ser	Pro	Leu
		980					985					990		
Ile Ly	s Gln	Lys	Met	Trp	Leu	Lys	Leu	Gly	Leu	Ala	Ile	Thr	Ala	Arg
	995				-	1000]	1005			
Lys Il	e Arg	Glu	His	Leu	Ser	Tyr	Glu	Asp	Trp	Asn	Tyr	Asn	Met	Gln
101	0			-	1015					1020				
Leu Ly	s Leu	Ser	Asn	Ile	Tyr	Val	Val	Asp	Ile	Pro	Met	Ser	Thr	Lys
1025				1030					1035					1040
Thr As	p Ile	Tyr	Asp	Glu	Asn	Leu	Ile	Tyr	Val	Ile	Leu	Ile	His	Gly
			1045				-	1050]	1055	
Ala Va	l Glu	Asp	Cys	Leu	Leu	Arg	Lys	Thr	Tyr	Arg	Ala	Pro	Phe	Leu
		1060					1065				-	1070		•
Ile Pr	o Ile	Thr	Cys	His	Gln	Ile	Gln	Ser	Ile	Glu	Asp	Phe	Thr	Lys
	1075					1080					1085			
Val Va	l Ile	Ile	Gln	Thr	Pro	Ile	Asn	Met	Lys	Thr	Phe	Arg	Arg	Asn
109	0				1095					1100				
Ile Ar	g Lys	Phe	Val	Pro	Lys	His	Lys	Ser	Tyr	Leu	Thr	Pro	Gly	Leu
1105				1110				-	1115				-	1120
Ile Gl	y Ser	Val	Gly	Thr	Leu	Glu	Glu	Gly	Ile	Gln	Glu	Glu	Arg	Asn
			1125				-	1130				-	1135	
Val Ly	s Glu	Asp	Gly	Ala	His	Ser	Ala	Ala	Thr	Ala	Arg	Ser	Pro	Gln
		1140					1145					1150		
Pro Cy	s Ser	Leu	Leu	Gly	Thr	Lys	Phe	Asn	Cys	Lys	Glu	Ser	Pro	Arg
	1155					1160					1165			

<210> 3313

1170

Ile Asn Leu Arg Lys Val Arg Lys Glu

<211> 359

<212> PRT

<213> Homo sapiens

<400> 3313

Met Arg Ala Ala Met Thr Thr Ala Ile Leu Glu Arg Leu Ser Thr

1 5 10 15

Leu Ser Val Ser Gly Gln Gln Leu Arg Arg Leu Pro Lys Ile Leu Glu 20 25 30

Asp Gly Leu Pro Lys Met Pro Cys Thr Val Pro Glu Thr Asp Val Pro
35 40 45

Gln Leu Phe Arg Glu Pro Tyr Ile Arg Thr Gly Tyr Arg Pro Thr Gly
50 55 60

His Glu Trp Arg Tyr Tyr Phe Phe Ser Leu Phe Gln Lys His Asn Glu 65 70 75 80

Val Val Asn Val Trp Thr His Leu Leu Ala Ala Leu Ala Val Leu Leu

85 90 95

Arg Phe Trp Ala Phe Ala Glu Ala Glu Ala Leu Pro Trp Ala Ser Thr
100 105 110

His Ser Leu Pro Leu Leu Phe Ile Leu Ser Ser Ile Thr Tyr Leu 115 120 125

Thr Cys Ser Leu Leu Ala His Leu Leu Gln Ser Lys Ser Glu Leu Ser 130 135 140

His Tyr Thr Phe Tyr Phe Val Asp Tyr Val Gly Val Ser Val Tyr Gln 145 150 155 160

Tyr Gly Ser Ala Leu Ala His Phe Phe Tyr Ser Ser Asp Gln Ala Trp

165 170 175

Tyr Asp Arg Phe Trp Leu Phe Phe Leu Pro Ala Ala Ala Phe Cys Gly
180 185 190

Trp	Leu	Ser	Cys	Ala	Gly	Cys	Ser	Tyr	Ala	Lys	Tyr	Arg	Tyr	Arg	Arg
		195					200					205			
Pro	Tyr	Pro	Val	Met	Arg	Lys	Ile	Cys	Gln	Val	Val	Pro	Ala	Gly	Leu
	210					215					220				
Ala	Phe	Ile	Leu	Asp	Ile	Ser	Pro	Val	Ala	His	Arg	Val	Ala	Leu	Cys
225					230					235					240
His	Leu	Ala	Gly	Cys	Gln	Glu	Gln	Ala	Ala	Trp	Tyr	His	Thr	Leu	Gln
				245					250					255	
Ile	Leu	Phe	Phe	Leu	Val	Ser	Ala	Tyr	Phe	Phe	Ser	Cys	Pro	Val	Pro
			260					265					270		
Glu	Lys	Tyr	Phe	Pro	Gly	Ser	Cys	Asp	Ile	Val	Gly	His	Gly	His	Gln
		275					280					285			
Ile	Phe	His	Ala	Phe	Leu	Ser	Ile	Cys	Thr	Leu	Ser	Gln	Leu	Glu	Ala
	290					295					300				
Ile	Leu	Leu	Asp	Tvr	Gln	C1 ₃₇	Α	٥.				_		Α .	Hie
305					0111	Uly	Arg	Gln	Glu	Ile	Phe	Leu	Gln	Arg	1113
				J	310	Uly	Arg	Gln	Glu	Ile 315	Phe	Leu	Gln	Arg	320
Gly	Pro	Leu	Ser							315					320
Gly	Pro	Leu	Ser		310					315					320
				Val 325	310	Met	Ala	Cys	Leu 330	315 Ser	Phe	Phe	Phe	Leu 335	320 Ala
				Val 325	310 His	Met	Ala	Cys	Leu 330	315 Ser	Phe	Phe	Phe	Leu 335	320 Ala
Ala	Cys	Ser	Ala 340	Val 325 Ala	310 His	Met	Ala	Cys Leu	Leu 330	315 Ser	Phe	Phe	Phe Val	Leu 335	320 Ala

<210> 3314

<211> 820

<212> PRT

<213> Homo sapiens

<400> 3314 Met Asn Pro Tyr Val Pro Asp Lys Leu Ile Thr Ala Gly Ile Lys His Met Lys Phe Trp Arg Lys Ala Gly Asp Val Cys Ile Trp Arg Asp Ile Phe Leu Val Lys Thr Val Lys Ala His Asp Gly Pro Val Phe Ser Met His Ala Leu Glu Lys Gly Phe Val Thr Gly Gly Lys Asp Gly Ile Val Ala Leu Trp Asp Asp Ser Phe Glu Arg Cys Leu Lys Thr Tyr Ala Ile Lys Arg Ala Ala Leu Ala Pro Gly Ser Lys Gly Leu Leu Leu Glu Asp Asn Pro Ser Ile Arg Ala Ile Ser Leu Gly His Gly His Ile Leu Val Gly Thr Lys Asn Gly Glu Ile Leu Glu Val Asp Lys Ser Gly Pro Ile Thr Leu Leu Val Gln Gly His Met Glu Gly Glu Val Trp Gly Leu Ala Thr His Pro Tyr Leu Pro Ile Cys Ala Thr Val Ser Asp Asp Lys Thr Leu Arg Ile Trp Asp Leu Ser Pro Ser His Cys Met Leu Ala Val Arg Lys Leu Lys Lys Gly Gly Arg Cys Cys Phe Ser Pro Asp Gly Lys Ala Leu Ala Val Gly Leu Asn Asp Gly Ser Phe Leu Met Ala Asn Ala

Asp Thr Leu Glu Asp Leu Val Ser Phe His His Arg Lys Asp Met Ile

Ser	Asp	Ile	Arg	Phe	Ser	Pro	Gly	Ser	Gly	Lys	Tyr	Leu	Ala	Val	Ala
225					230					235					240
Ser	His	Asp	Ser	Phe	Ile	Asp	Ile	Tyr	Asn	Val	Met	Ser	Ser	Lys	Arg
				245					250					255	
Val	Gly	Ile	Cys	Lys	Gly	Ala	Thr	Ser	Tyr	Ile	Thr	His	Ile	Asp	Trp
			260					265					270		
Asp	Ile	Arg	Gly	Lys	Leu	Leu	Gln	Val	Asn	Thr	Gly	Ala	Lys	Glu	Gln
		275					280					285			
Leu	Phe	Phe	Glu	Ala	Pro	Arg	Gly	Lys	Lys	Gln	Thr	Ile	Pro	Ser	Val
	290					295					300				
Glu	Val	Glu	Lys	Ile	Ala	Trp	Ala	Ser	Trp	Thr	Ser	Val	Leu	Gly	Leu
305					310					315					320
Cys	Cys	Glu	Gly	Ile	Trp	Pro	Val	Ile	Gly	Glu	Val	Thr	Asp	Val	Thr
				325					330					335	
Ala	Ser	Cys	Leu	Thr	Ser	Asp	Lys	Met	Val	Leu	Ala	Thr	Gly	Asp	Asp
			340					345					350		
Leu	Gly	Phe	Val	Lys	Leu	Phe	Arg	Tyr	Pro	Thr	Lys	Gly	Lys	Phe	Gly
		355					360					365			
Lys	Phe	Lys	Arg	Tyr	Val	Ala	His	Ser	Thr	His	Val	Thr	Asn	Val	Arg
	370					375					380				
Trp	Thr	Tyr	Asp	Asp	Ser	Met	Leu	Val	Thr	Leu	Gly	Gly	Thr	Asp	Met
385					390					395					400
Ser	Leu	Met	Val	Trp	Thr	Asn	Glu	Met	Glu	Gly	Tyr	Arg	Glu	Lys	Arg
				405					410					415	
Pro	Cys	Asp	Ser	Glu	Glu	Ser	Asp	Ile	Asp	Ser	Glu	Glu	Asp	Gly	Gly
			420					425					430		
Tyr	Asp	Ser	Asp	Val	Thr	Arg	Glu	Asn	Glu	Ile	Ser	Tyr	Thr	Ile	Arg
		435					440					445			
Ala	Leu	Ser	Thr	Asn	Tle	Arø	Pro	Met	Leu	Glv	He	Lvs	Pro	His	Leu

	450					455					460				
Gln	Gln	Lys	Glu	Pro	Ser	Ile	Asp	Glu	Arg	Pro	Pro	Val	Ser	Arg	Ala
465					470					475					480
Pro	Pro	Gln	Pro	Glu	Lys	Leu	Gln	Thr	Asn	Asn	Val	Gly	Lys	Lys	Lys
				485					490					495	
Arg	Pro	Ile	Glu	Asp	Leu	Val	Leu	Glu	Leu	Ile	Phe	Gly	Tyr	Arg	Gly
			500					505					510		
Arg	Asp	Cys	Arg	Asn	Asn	Val	His	Tyr	Leu	Asn	Asp	Gly	Asp	Asp	Ile
		515					520					525			
Ile	Tyr	His	Thr	Ala	Ser	Val	Gly	Ile	Leu	His	Asn	Val	Ala	Thr	Gly
	530					535					540				
Ser	Gln	Ser	Phe	Tyr	Gln	Glu	His	Asn	Asp	Asp	Ile	Leu	Cys	Leu	Thr
545					550					555					560
Val	Asn	Gln	His	Pro	Lys	Phe	Ile	Asn	Ile	Val	Ala	Thr	Gly	Gln	Val
				565					570					575	
Gly	Asp	Ser	Ala	Asp	Met	Ser	Ala	Thr	Ala	Pro	Ser	Ile	His	Ile	Trp
			580					585					590		
Asp	Ala	Met	Asn	Lys	Gln	Thr	Leu	Ser	Ile	Leu	Arg	Cys	Tyr	His	Ser
		595					600					605			
Lys	Gly	Val	Cys	Ser	Val	Ser	Phe	Ser	Ala	Thr	Gly	Lys	Leu	Leu	Leu
	610					615					620				
Ser	Val	Gly	Leu	Asp	Pro	Glu	His	Thr	Ile	Thr	Ile	Trp	Arg	Trp	Glr
625					630					635					640
Glu	Gly	Ala	Lys	Ile	Ala	Ser	Arg	Ala	Gly	His	Asn	Gln	Arg	Ile	Phe
				645					650					655	
Val	Ala	Glu	Phe	Arg	Pro	Asp	Ser	Asp	Thr	Gln	Phe	Val	Ser	Val	Gly
			660					665					670		
Val	Lys	His	Val	Lys	Phe	Trp	Thr	Leu	Ala	Gly	Arg	Ala	Leu	Leu	Ser
		675					680					685			

Lys Lys Gly Leu Leu Ser Thr Leu Glu Asp Ala Arg Met Gln Thr Met 695 700 690 Leu Ala Ile Ala Phe Gly Ala Asn Asn Leu Thr Phe Thr Gly Thr Ile 710 715 720 705 Ser Gly Asp Val Cys Val Trp Lys Asp His Ile Leu Cys Arg Ile Val 730 725 735 Ala Arg Ala His Asn Gly Pro Val Phe Ala Met Tyr Thr Thr Leu Arg 750 745 740 Asp Gly Leu Ile Val Thr Gly Gly Lys Glu Arg Pro Ser Lys Glu Gly 765 755 760 Gly Ala Val Lys Leu Trp Asp Gln Glu Leu Arg Arg Cys Arg Ala Phe 770 775 780 Arg Leu Glu Thr Gly Gln Ala Thr Asp Cys Val Arg Ser Val Cys Arg 790 795 800 785 Gly Lys Val Phe Thr Arg Glu Asp Phe Glu Ser Phe His His Lys Glu 805 810 815 Met Ile Asn Val 820

<210> 3315

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3315

Met Cys Ser Gly Ser Cys Cys Gly Gln Cys Ser Leu Val Ser Glu Ala 1 5 10 15

Leu Phe Val Leu Val Trp Pro Arg Thr Ser Gln Lys Thr Val Leu Ser

Cys Gly Gly Arg His Gly Arg Ser Arg Ser Leu Pro Pro Ala Leu Glu Trp Ala Gly Leu Leu Val Leu Cys Ser Gly Arg Thr Leu Pro Asp Phe Gln Val Phe Pro Gly Val Arg His Pro Ile Ala Ala Phe Ser Leu Val Thr Leu Thr Ser Phe Leu Leu Arg Leu Val Leu Asp Leu Gln Gly His Leu Pro Arg Leu Pro Trp Lys Gly Ala Leu Ser Ser Phe Leu Tyr Phe Asp Asp Phe Glu Arg Phe Pro Ile Val Thr Val Arg Lys Leu Ala Ser Glu Ala Lys Ile Leu Leu Leu Ser Trp Pro Leu <210> 3316 <211> 358 <212> PRT <213> Homo sapiens <400> 3316 Met Phe Arg Ser Pro Gly Thr Leu Glu Ile Leu Thr Pro Leu Arg Asp Thr Ala Phe Pro Ala Phe Asp Phe Gln Lys Cys Leu Val Asn Ile Gln Ala Leu Leu Met Asp Pro Glu Leu His Val Gly Lys Cys Lys Ile Glu

Phe	Leu	Thr	Gly	Glu	Phe	Ile	Tyr	Arg	Met	Tyr	Thr	Ile	Asp	Met	His
	50					55					60				
Ser	Gln	Leu	Glu	Leu	Thr	Ala	Ser	Leu	Ile	Pro	Gln	Pro	Gly	Thr	Ser
65					70					75					80
Leu	Ile	Pro	Leu	Val	Met	Val	Ser	Asn	Pro	His	Ser	Leu	Gly	Phe	Gln
				85					90					95	
Ala	Thr	Phe	Tyr	Glu	Asn	Gly	Tyr	Thr	Ser	Asp	Gly	Asn	Thr	Lys	Tyr
			100					105					110		
Lys	Leu	Asp	Ile	Phe	Leu	Lys	Gln	Gln	Gln	His	Trp	Gly	Arg	Thr	Asp
		115					120					125			
Ser	Asn	Phe	Thr	Ser	Ser	Leu	Lys	Lys	Ala	Thr	Met	Ser	Thr	Leu	Thr
	130					135					140				
Val	Asp	Ile	Ala	Asn	Lys	Glu	Ile	Ser	Cys	Val	Asp	Ile	Lys	Pro	Leu
145					150					155					160
Ser	Thr	Leu	Ile	Ser	Val	Gly	Cys	Asp	Leu	Asp	Lys	Lys	Ile	Val	Ile
				165					170					175	
Gln	Asn	Lys	Val	Ser	Ala	Cys	Ser	Met	Gly	Ile	Leu	Asp	Pro	Leu	Thr
			180					185					190		
Leu	Gln	Asp	Asn	Tyr	Ser	Phe	Ile	Ile	Glu	Lys	Glu	Phe	Tyr	Asp	Pro
		195					200					205			
Gly	Phe	Gln	Gly	Gln	Gln	Ser	Ser	Glu	Asp	Leu	His	Val	Phe	Tyr	Ser
	210					215					220				
Tyr	Gln	Gln	Leu	Gly	Cys	Pro	Leu	Leu	Val	Tyr	Tyr	Asp	Thr	Leu	Trp
225					230					235					240
Lys	Pro	Val	Val	Glu	Leu	Leu	Glu	Cys	Ser	Gly	Met	Asn	Thr	Val	His
				245					250					255	
Cys	Ser	Leu	Asn	Leu	Pro	Gly	Ser	Ser	Gly	Pro	Pro	Ala	Ser	Ala	Ser
			260					265					270		
Gln	Val	Ala	Glv	Thr	Ala	Val	Ala	Tvr	His	Asn	Ala	Arg	Leu	Ile	Phe

Phe Phe Phe Phe Phe Phe Leu Arg Gln Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Val Ile Leu Ala His Arg Lys Leu Arg Leu Pro Gly Ser Arg His Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Ala Arg His Cys Ala Arg Leu Ile Phe Phe Ile Phe Ser Arg

Asp Arg Val Ser Pro Cys

<210> 3317

<211> 262

<212> PRT

<213> Homo sapiens

<400> 3317

Met Gly Ser Arg Pro Cys Ser Pro Ser Ala Cys Leu Ala Pro Trp Trp Gly Gln Gln Pro Gly Gly Pro Gly Pro Ala Lys Arg Ser Arg Leu Glu Glu Pro Ala Gly Pro Glu Ser Arg Ala Ala Pro Ser Pro Glu Asp Pro Ala Gly Thr Pro Ala Val Asp Ala Leu Thr Ser Met Val Val Leu Asp Ala Gly Cys Ala Leu Arg Val Pro Leu Glu Asp Val Asp Leu Val Leu

Glu	Leu	Ala	Pro	Met	Ser	Val	Leu	Arg	Val	Ser	Leu	Gly	Gly	His	Thr
				85					90					95	
Leu	Ile	Val	Ile	Pro	Glu	Val	Leu	Leu	Ser	Ser	Val	Asp	Glu	Cys	Ser
			100					105					110		
Gly	Ala	Gln	Gly	Asp	Trp	Ser	Ala	Gly	Leu	Glu	Val	Asp	Val	Phe	Leu
		115					120					125			
Gly	Ala	His	Gly	Glu	Asp	Val	Val	Val	Glu	Gln	Glu	Val	Cys	Ala	Ser
	130					135					140				
Val	Pro	Glu	Ile	Ala	Ala	Glu	Glu	Glu	Ala	Tyr	Glu	Glu	Asp	Ala	Asp
145					150					155					160
Ser	Glu	Phe	Pro	Glu	Leu	Trp	Met	Asp	Ser	Ala	Ala	Gly	Ser	Ala	Ala
				165					170					175	
Gly	Leu	Tyr	Pro	Ser	Ala	Arg	Ser	Met	Phe	Ser	Pro	Tyr	Arg	Glu	Gly
			180					185					190		
Pro	Ile	Arg	Gly	Pro	Cys	Ala	Leu	Ala	Pro	Asn	Pro	Ser	Ser	Glu	Arg
		195					200					205			
Arg	Ser	Pro	Arg	Pro	Ile	Phe	Asp	Leu	Glu	Phe	His	Leu	Leu	Glu	Pro
	210					215					220				
Val	Pro	Ser	Ser	Pro	Leu	Gln	Pro	Leu	Pro	Pro	Ser	Pro	Ser	Pro	Gly
225					230					235					240
Pro	His	Ala	Arg	Pro	Glu	Leu	Pro	Glu	Arg	Pro	Pro	Cys	Lys	Val	Arg
				245					250					255	
Arg	Arg	Leu	Phe	Gln	Glu										

. <210> 3318

260

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3318

Met Tyr Ser Gly Glu Phe Gly Leu Val Arg Val Tyr Ala Thr Phe Tyr

1 5 10 15

Leu Ser Asp Leu Lys Gln Ile Lys Ile Asp Leu Gly Lys Phe Ser Asp

20 25 30

Asn Pro Asp Gly Cys Ile Asp Val Leu Gln Gly Leu Gly Gln Ser Phe

35 40 45

Asp Leu Thr Trp Arg Asp Ile Met Leu Leu Leu Asp Gln Thr Leu Thr

50 55 60

Pro Asn Glu Arg Ser Thr Val Ile Thr Ala Ala Arg Glu Phe Gly Asp

65 70 75 80

Leu Trp Tyr Leu Ser Gln Val Asn Asp Arg Met Thr Thr Glu Glu Arg

85 90 95

Glu Gln Phe Pro Thr Gly Gln Gln Ala Val Pro Arg Leu Asp Pro His

100 105 110

Trp Asp Ala Glu Ser Glu His Gly Asp Trp Cys His Arg His Leu Leu

115 120 125

Thr Cys Val Leu Glu Gly Leu Arg Lys Thr Arg Gln Lys Pro Ile Asn

130 135 140

Tyr Ser Met Met Ser Thr Ile Thr Gln Gly Lys Lys Ile Leu Leu

145 150 155 160

Pro Phe Trp Arg Asp

165

<210> 3319

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3319

Met Phe Ser Met Val Leu Ala Asp Thr Val Gln Val Gly Glu Gly Gln

1 5 10 15

Ala Gly Ala Phe Arg Gln Leu Thr Trp Ala Ala Leu Pro Phe Gln Val

20 25 30

Ile Val Gln Ser Gly Arg His Pro Thr Val Leu Gln Lys Leu Cys Gln

35 40 45

Leu Pro Phe Gln Tyr Phe Ser Asp Pro Arg Leu Ile Lys Val Leu Phe

50 55 60

Pro Ser Leu Ile Ala Ala Cys Asp Asn Asn His Gln Asn Lys Ile Ile

65 70 75 80

Leu Glu Gln Glu Met Ser Cys Val Leu Leu Ala Thr Phe Ile Gln Asp

85 90 95

Leu Ala Gln Thr Pro Gly Gln Ala Glu Asn Gln Pro Tyr Gln Pro Lys

100 105 110

Gly Met Ser Leu Leu Lys Leu Asn Phe Met Cys Leu Leu Ala Lys Trp

115 120 125

Thr Ser Phe Leu Ser Phe Pro Leu Glu Leu Leu His Tyr Met

130 135 140

<210> 3320

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3320

Met Cys Arg Gly Arg Asp Gly Ala Leu Ala Arg Arg Trp Glu Ala Gly

1 5 10 15

Gly Ser Ala Gly Ala Pro Gly Glu Asp Gly Thr Pro Pro Pro Leu Leu

20 25 30

Leu Arg Thr Gly Lys Ala Phe Gly Pro Glu Leu Gly Ala Gln Asn Gly

35 40 45

Ser Val Arg Cys Leu Ser His Pro Asp Pro Ala Pro Gly Phe Phe Arg

50 55 60

Ser Arg Arg Trp Ile Gly Cys Ile Thr Arg Leu Pro Pro Ala Thr Leu

65 70 75 80

Pro Ala Gln Ser Leu Gln Lys Pro Pro Leu Ser Pro Ser Pro Gly Pro

85 90 95

Tyr Pro Leu Ser Gln Pro His Phe Pro Pro Pro

100

<210> 3321

<211> 208

<212> PRT

<213> Homo sapiens

<400> 3321

Met Ser Pro Thr Lys Asp Ser His Pro Ser Pro His Phe Pro Arg Asp

1 5 10 15

Ser Gly Ile His Ala Pro Thr Pro Pro Asp Ser Gly Ala Leu Thr Leu

20 25 30

Ser Pro Pro Val Ser Gln Gly Pro Gly Val Gly Pro Arg Thr Gly Arg

35 40 45

Gly Asn Arg Leu Cys Arg Pro Pro Gly Arg Ser Ala Ala Arg Ser Phe Cys Leu Leu Pro Gly Pro Pro Leu Gly Thr Gly Ala Leu Gly Ser Pro Arg Ala Ala Gln Gly Leu Gly Phe Arg Gly Ser Gly Gln Arg Ala Arg His Asn Ser Phe Thr Ser Pro Ser Pro Pro Gly Ala His His Pro Leu Gly Thr His Thr Arg Ala Leu Pro Pro Pro Leu Ala Arg Cys Pro Cys Ala Ala Leu Leu Ala Gly Arg Glu Cys His Gly Gly Pro Ser Pro Ala Ala Pro Arg Pro Leu Pro Gly Thr Ser Leu Thr Trp Pro Ser Arg Ala Pro Leu Pro Arg Pro Pro Pro Arg Glu Arg Gln Gly Pro Gly Asp Arg Ser Pro Ser Pro Ser Ala Pro Ser Cys Pro Gly Val Gly Ala Ser Ser Pro Arg Arg Arg Lys Pro Arg Glu Ala Ala Gly Leu Thr Pro Asp Gly

<210> 3322

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3322

Met Tyr Lys Phe Leu Asp Thr Tyr Thr Leu Pro Ser Leu Lys Gln Glu

5 1 10 15 Glu Ile Glu Phe Leu Lys Arg Pro Ile Thr Ser Ser Glu Ile Glu Ala 30 20 25 Val Ile Asn Ser Leu Pro Thr Lys Ser Pro Gly Pro Asp Gly Phe Thr 35 40 45 Ala Lys Ser Tyr Gln Arg Tyr Lys Glu Glu Leu Val Leu Phe Leu Leu 60 50 55 Lys Pro Phe Gln Arg Ile Glu Lys Glu Gly Ile Leu Pro Asn Ser Phe 65 70 75 80 Tyr Glu Ser Ser Val Ile Leu Ile Pro Lys Pro His Arg Asp Thr Thr 85 90 95 Lys Glu Asn Phe Arg Pro Ile Ser Leu Met Asn Ile Asn Ala Lys Ile 100 110 105 Leu Asn Lys Ile Leu Ala Asn 115

<210> 3323

<211> 881

<212> PRT

<213> Homo sapiens

<400> 3323

Met Glu Arg Gly Lys Tyr Ser Ser Lys Leu Glu Arg Glu Ser Lys

1 5 10 15

Arg Thr Ser Glu Asn Glu Ala Ile Lys Arg Cys Cys Ser Pro Pro Asn
20 25 30

Glu Leu Gly Phe Arg Arg Gly Ser Ser Tyr Ser Lys His Asp Ser Ser
35 40 45

Ala	Ser	Arg	Tyr	Lys	Ser	Thr	Leu	Ser	Lys	Pro	Ile	Pro	Lys	Ser	Asp
	50					55					60				
Lys	Phe	Lys	Asn	Ser	Phe	Cys	Cys	Thr	Glu	Leu	Asn	Glu	Glu	Ile	Lys
65					70					75					80
Gln	Ser	His	Ser	Phe	Ser	Leu	Gln	Thr	Pro	Cys	Ser	Lys	Gly	Ser	Glu
				85					90					95	
Leu	Arg	Met	Ile	Asn	Lys	Asn	Pro	Glu	Arg	Glu	Lys	Ala	Gly	Ser	Pro
			100					105					110		
Ala	Pro	Ser	Asn	Arg	Leu	Asn	Asp	Ser	Pro	Thr	Leu	Lys	Lys	Leu	Asp
		115					120					125			
Glu	Leu	Pro	Ile	Phe	Lys	Ser	Glu	Phe	Ile	Thr	His	Asp	Ser	His	Asp
	130					135					140				
Ser	Ile	Lys	Glu	Leu	Asp	Ser	Leu	Ser	Lys	Val	Lys	Asn	Asp	Gln	Leu
145					150					155					160
Arg	Ser	Phe	Cys	Pro	Ile	Glu	Leu	Asn	Ile	Asn	Gly	Ser	Pro	Gly	Ala
				165					170					175	
Glu	Ser	Asp	Leu	Ala	Thr	Phe	Cys	Thr	Ser	Lys	Thr	Asp	Ala	Val	Leu
			180					185					190		
Met	Thr	Ser	Asp	Asp	Ser	Val	Thr	Gly	Ser	Glu	Leu	Ser	Pro	Leu	Val
		195					200					205			
Lys	Ala	Cys	Met	Leu	Ser	Ser	Asn	Gly	Phe	Gln	Asn	Ile	Ser	Arg	Cys
	210					215					220				
Lys	Glu	Lys	Asp	Leu	Asp	Asp	Thr	Cys	Met	Leu	His	Lys	Lys	Ser	Glu
225					230					235					240
Ser	Pro	Phe	Arg	Glu	Thr	Glu	Pro	Leu	Val	Ser	Pro	His	Gln	Asp	Lys
				245					250					255	
Leu	Met	Ser	Met	Pro	Val	Met	Thr	Val	Asp	Tyr	Ser	Lys	Thr	Val	Val
			260					265					270		
Lys	Glu	Pro	Val	Asp	Thr	Arg	Val	Ser	Cys	Cys	Lys	Thr	Lys	Asp	Ser

		275					280					285			
Asp	Ile	Tyr	Cys	Thr	Leu	Asn	Asp	Ser	Asn	Pro	Ser	Leu	Cys	Asn	Ser
	290					295					300				
Glu	Ala	Glu	Asn	Ile	Glu	Pro	Ser	Val	Met	Lys	Ile	Ser	Ser	Asn	Ser
305					310					315					320
Phe	Met	Asn	Val	His	Leu	Glu	Ser	Lys	Pro	Val	Ile	Cys	Asp	Ser	Arg
				325					330					335	
Asn	Leu	Thr	Asp	His	Ser	Lys	Phe	Ala	Cys	Glu	Glu	Tyr	Lys	Gln	Ser
			340					345					350		
Ile	Gly	Ser	Thr	Ser	Ser	Ala	Ser	Val	Asn	His	Phe	Asp	Asp	Leu	Tyr
		355					360					365			
Gln	Pro	Ile	Gly	Ser	Ser	Gly	Ile	Ala	Ser	Ser	Leu	Gln	Ser	Leu	Pro
	370					375					380				
Pro	Gly	Ile	Lys	Val	Asp	Ser	Leu	Thr	Leu	Leu	Lys	Cys	Gly	Glu	Asn
385					390					395					400
Thr	Ser	Pro	Val	Leu	Asp	Ala	Val	Leu	Lys	Ser	Lys	Lys	Ser	Ser	Glu
				405					410					415	
Phe	Leu	Lys	His	Ala	Gly	Lys	Glu	Thr	Ile	Val	Glu	Val	Gly	Ser	Asp
			420					425					430		
Leu	Pro	Asp	Ser	Gly	Lys	Gly	Phe	Ala	Ser	Arg	Glu	Asn	Arg	Arg	Asn
		435					440					445			
Asn	Gly	Leu	Ser	Gly	Lys	Cys	Leu	Gln	Glu	Ala	Gln	Glu	Glu	Gly	Asn
	450					455					460				
Ser	Ile	Leu	Pro	Glu	Arg	Arg	Gly	Arg	Pro	Glu	Ile	Ser	Leu	Asp	Glu
465					470					475					480
Arg	Gly	Glu	Gly	Gly	His	Val	His	Thr	Ser	Asp	Asp	Ser	Glu	Val	Val
				485					490					495	
Phe	Ser	Ser	Cys	Asp	Leu	Asn	Leu	Thr	Met	Glu	Asp	Ser	Asp	Gly	Val
			500					505					510		

Thr	Tyr	Ala	Leu	Lys	Cys	Asp	Ser	Ser	Gly	His	Ala	Pro	Glu	Ile	Val
		515					520					525			
Ser	Thr	Val	His	Glu	Asp	Tyr	Ser	Gly	Ser	Ser	Glu	Ser	Ser	Asn	Asp
	530					535					540				
Glu	Ser	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asp	Asp	Ser	Ser	Ile	Pro	Arg
545					550					555					560
Asn	Arg	Leu	Gln	Ser	Val	Val	Val	Val	Pro	Lys	Asn	Ser	Thr	Leu	Pro
				565					570					575	
Met	Glu	Glu	Thr	Ser	Pro	Cys	Ser	Ser	Arg	Ser	Ser	Gln	Ser	Tyr	Arg
			580					585					590		
His	Tyr	Ser	Asp	His	Trp	Glu	Asp	Glu	Arg	Leu	Glu	Ser	Arg	Arg	His
		595					600					605			
Leu	Tyr	Glu	Glu	Lys	Phe	Glu	Ser	Ile	Ala	Ser	Lys	Ala	Cys	Pro	Gln
	610					615					620				
Thr	Asp	Lys	Phe	Phe	Leu	His	Lys	Gly	Thr	Glu	Lys	Asn	Pro	Glu	Ile
625					630					635					640
Ser	Phe	Thr	Gln	Ser	Ser	Arg	Lys	Gln	Ile	Asp	Asn	Arg	Leu	Pro	Glu
				645					650					655	
Leu	Ser	His	Pro	Gln	Ser	Asp	Gly	Val	Asp	Ser	Thr	Ser	His	Thr	Asp
			660					665					670		
Val	Lys	Ser	Asp	Pro	Leu	Gly		Pro	Asn	Ser	Glu		Thr	Val	Lys
		675					680					685			
Ala		Ile	Pro	Ser	Arg		Gln	Glu	Glu	Leu		Ile	Tyr	Ser	Ser
	690					695					700				
Asp	Phe	Glu	Asp	Val	Pro	Asn	Lys	Ser	Trp		Gln	Thr	Thr	Phe	
705					710					715					720
Asn	Arg	Pro	Asp		Arg	Leu	Gly	Lys		Glu	Leu	Ser	Phe		Ser
				725					730					735	
Ser	Cys	Glu	Ile	Pro	His	Val	Asp	Gly	Leu	His	Ser	Ser	Glu	Glu	Leu

Arg Asn Leu Gly Trp Asp Phe Ser Gln Glu Lys Pro Ser Thr Thr Tyr Gln Gln Pro Asp Ser Ser Tyr Gly Ala Cys Gly Gly His Lys Tyr Gln Gln Asn Ala Glu Gln Tyr Gly Gly Thr Arg Asp Tyr Trp Gln Gly Asn Gly Tyr Trp Asp Pro Arg Ser Gly Arg Pro Pro Gly Thr Gly Val Val Tyr Asp Arg Thr Gln Gly Gln Val Pro Asp Ser Leu Thr Asp Asp Arg Glu Glu Glu Glu Asn Trp Asp Gln Gln Asp Gly Ser His Phe Ser Asp Gln Ser Asp Lys Phe Leu Leu Ser Leu Gln Lys Asp Lys Gly Ser Val Gln Ala Pro Glu Ile Ser Ser Asn Ser Ile Lys Asp Thr Leu Ala Val Asn

<210> 3324

<211> 1018

<212> PRT

<213> Homo sapiens

<400> 3324

Met Cys Ile Cys Gly Thr Ala His Ser Val Leu Asp Glu Gly Pro Val

1 5 10 15

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			20					25					30		
Ala	His	Glu	Cys	Leu	Gly	Glu	Ala	Leu	Arg	Val	Met	His	Gln	Ile	Ile
		35					40					45			
Ser	Lys	Tyr	Pro	Leu	Leu	Asn	Thr	Val	Glu	Thr	Leu	Thr	Ala	Ala	Gly
	50					55					60				
Thr	Leu	Ile	Ala	Lys	Val	Lys	Ala	Phe	His	Tyr	Glu	Ser	Asn	Asn	Asp
65					70					75					80
Leu	Glu	Lys	Gln	Glu	Phe	Glu	Lys	Ala	Leu	Glu	Thr	Ile	Ala	Val	Ala
				85					90					95	
Phe	Ser	Ser	Thr	Val	Ser	Glu	Phe	Leu	Met	Gly	Glu	Val	Asp	Ser	Ser
			100					105					110		
Thr	Leu	Leu	Ala	Val	Pro	Pro	Gly	Asp	Ser	Ser	Gln	Ser	Met	Glu	Ser
		115					120					125			
Leu	Tyr	Gly	Pro	Gly	Ser	Glu	Gly	Thr	Pro	Pro	Ser	Leu	Asp	Asp	Cys
	130					135					140				
Asp	Ala	Gly	Cys	Leu	Pro	Ala	Glu	Glu	Val	Asp	Val	Leu	Leu	Gln	Arg
145					150					155					160
Cys	Glu	Gly	Gly	Val	Asp	Ala	Ala	Leu	Leu	Tyr	Ala	Lys	Asn	Met	Ala
				165					170					175	
Lys	Tyr	Met	Lys	Asp	Leu	Ile	Ser	Tyr	Leu	Glu	Lys	Arg	Thr	Thr	Leu
			180					185					190		
Glu	Met	Glu	Phe	Ala	Lys	Gly	Leu	Gln	Lys	Ile	Ala	His	Asn	Cys	Arg
		195					200					205			
Gln	Ser	Val	Met	Gln	Glu	Pro	His	Met	Pro	Leu	Leu	Ser	Ile	Tyr	Ser
	210					215					220				
Leu	Ala	Leu	Glu	Gln	Asp	Leu	Glu	Phe	Gly	His	Ser	Met	Val	Gln	Ala
225					230					235					240
Val	Gly	Thr	Leu	Gln	Thr	Gln	Thr	Phe	Met	Gln	Pro	Leu	Thr	Leu	Arg

				245					250					255	
Arg	Leu	Glu	His	Glu	Lys	Arg	Arg	Lys	Glu	Ile	Lys	Glu	Ala	Trp	His
			260					265					270		
Arg	Ala	Gln	Arg	Lys	Leu	Gln	Glu	Ala	Glu	Ser	Asn	Leu	Arg	Lys	Ala
		275					280					285			
Lys	Gln	Gly	Tyr	Val	Gln	Arg	Cys	Glu	Asp	His	Asp	Lys	Ala	Arg	Phe
	290					295					300				
Leu	Val	Ala	Lys	Ala	Glu	Glu	Glu	Gln	Ala	Gly	Ser	Ala	Pro	Gly	Ala
305					310					315					320
Gly	Gly	Thr	Ala	Thr	Lys	Thr	Leu	Asp	Lys	Arg	Arg	Arg	Leu	Glu	Glu
				325					330					335	
Glu	Ala	Lys	Asn	Lys	Ala	Glu	Glu	Ala	Met	Ala	Thr	Tyr	Arg	Thr	Cys
			340					345					350		
Val	Ala	Asp	Ala	Lys	Thr	Gln	Gln	Glu	Leu	Glu	Asp	Thr	Lys	Val	Thr
		355					360					365			
Ala	Leu	Arg	Gln	Ile	Gln	Glu	Val	Ile	Arg	Gln	Ser	Asp	Gln	Thr	Ile
	370					375					380				
Lys	Ser	Ala	Thr	Ile	Ser	Tyr	Tyr	Gln	Met	Met	His	Met	Gln	Thr	Ala
385					390					395					400
Pro	Leu	Pro	Val	His	Phe	Gln	Met	Leu	Cys	Glu	Ser	Ser	Lys	Leu	Tyr
				405					410					415	
Asp	Pro	Gly	Gln	Gln	Tyr	Ala	Ser	His	Val	Arg	Gln	Leu	Gln	Arg	Asp
			420					425					430		
Gln	Glu	Pro	Asp	Val	His	Tyr	Asp	Phe	Glu	Pro	His	Val	Ser	Ala	Asn
		435					440					445			
Ala	Trp	Ser	Pro	Val	Met	Arg	Ala	Arg	Lys	Ser	Ser	Phe	Asn	Val	Ser
	450					455					460				
Asp	Val	Ala	Arg	Pro	Glu	Ala	Ala	Gly	Ser	Pro	Pro	Glu	Glu	Gly	Gly
465					470					475					480

Cys	Thr	Glu	Gly	Thr	Pro	Ala	Lys	Asp	His	Arg	Ala	Gly	Arg	Gly	His
				485					490					495	
Gln	Val	His	Lys	Ser	Trp	Pro	Leu	Ser	Ile	Ser	Asp	Ser	Asp	Ser	Gly
			500					505					510		
Leu	Asp	Pro	Gly	Pro	Gly	Ala	Gly	Asp	Phe	Lys	Lys	Phe	Glu	Arg	Thr
		515					520					525			
Ser	Ser	Ser	Gly	Thr	Met	Ser	Ser	Thr	Glu	Glu	Leu	Val	Asp	Pro	Asp
	530					535					540				
Gly	Gly	Ala	Gly	Ala	Ser	Ala	Phe	Glu	Gln	Ala	Asp	Leu	Asn	Gly	Met
545					550					555					560
Thr	Pro	Glu	Leu	Pro	Val	Ala	Val	Pro	Ser	Gly	Pro	Phe	Arg	His	Glu
				565					570					575	
Gly	Leu	Ser	Lys	Ala	Ala	Arg	Thr	His	Arg	Leu	Arg	Lys	Leu	Arg	Thr
			580					585					590		
Pro	Ala	Lys	Cys	Arg	Glu	Cys	Asn	Ser	Tyr	Val	Tyr	Phe	Gln	Gly	Ala
		595					600					605			
Glu	Cys	Glu	Glu	Cys	Cys	Leu	Ala	Cys	His	Lys	Lys	Cys	Leu	Glu	Thr
	610					615					620				
Leu	Ala	Ile	Gln	Cys	Gly	His	Lys	Lys	Leu	Gln	Gly	Arg	Leu	Gln	Leu
625					630					635					640
Phe	Gly	Gln	Asp	Phe	Ser	His	Ala	Ala	Arg	Ser	Ala	Pro	Asp	Gly	Val
				645					650					655	
Pro	Phe	Ile	Val	Lys	Lys	Cys	Val	Cys	Glu	Ile	Glu	Arg	Arg	Ala	Leu
			660					665					670		
Arg	Thr	Lys	Gly	Ile	Tyr	Arg	Val	Asn	Gly	Val	Lys	Thr	Arg	Val	Glu
		675					680					685			
Lys	Leu	Cys	Gln	Ala	Phe	Glu	Asn	Gly	Lys	Glu	Leu	Val	Glu	Leu	Ser
	690					695					700				
Gln	Ala	Ser	Pro	His	Asp	He	Ser	Asn	Val	Leu	Lvs	Leu	Tvr	Leu	Arg

705					710					715					720
Gln	Leu	Pro	Glu	Pro	Leu	Ile	Ser	Phe	Arg	Leu	Tyr	His	Glu	Leu	Val
				725					730					735	
Gly	Leu	Ala	Lys	Asp	Ser	Leu	Lys	Ala	Glu	Ala	Glu	Ala	Lys	Ala	Ala
			740					745					750		
Ser	Arg	Gly	Arg	Gln	Asp	Gly	Ser	Glu	Ser	Glu	Ala	Val	Ala	Val	Ala
		755					760					765			
Leu	Ala	Gly	Arg	Leu	Arg	Glu	Leu	Leu	Arg	Asp	Leu	Pro	Pro	Glu	Asn
	770					775					780				
Arg	Ala	Ser	Leu	Gln	Tyr	Leu	Leu	Arg	His	Leu	Arg	Arg	Ile	Val	Glu
785					790					795					800
Val	Glu	Gln	Asp	Asn	Lys	Met	Thr	Pro	Gly	Asn	Leu	Gly	Ile	Val	Phe
				805					810					815	
Gly	Pro	Thr	Leu	Leu	Arg	Pro	Arg	Pro	Thr	Glu	Ala	Thr	Val	Ser	Leu
			820					825					830		
Ser	Ser	Leu	Val	Asp	Tyr	Pro	His	Gln	Ala	Arg	Val	Ile	Glu	Thr	Leu
		835					840					845			
Ile	Val	His	Tyr	Gly	Leu	Val	Phe	Glu	Glu	Glu	Pro	Glu	Glu	Thr	Pro
	850					855					860				
Gly	Gly	Gln	Asp	Glu	Ser	Ser	Asn	Gln	Arg	Ala	Glu	Val	Val	Val	Gln
865					870					875					880
Val	Pro	Tyr	Leu	Glu	Ala	Gly	Glu	Ala	Val	Val	Tyr	Pro	Leu	Gln	Glu
				885					890					895	
Ala	Ala	Ala	Asp	Gly	Cys	Arg	Glu	Ser	Arg	Val	Val	Ser	Asn	Asp	Ser
			900					905					910		
Asp	Ser	Asp	Leu	Glu	Glu	Ala	Ser	Glu	Leu	Leu	Ser	Ser	Ser	Glu	Ala
		915					920					925			
Ser	Ala	Leu	Gly	His	Leu	Ser	Phe	Leu	Glu	Gln		Gln	Ser	Glu	Ala
	930					935					940				

Ser Leu Glu Val Ala Ser Gly Ser His Ser Gly Ser Glu Glu Gln Leu Glu Ala Thr Ala Arg Glu Asp Gly Asp Gly Asp Glu Asp Gly Pro Ala Gln Gln Leu Ser Gly Phe Asn Thr Asn Gln Ser Asn Asn Val Leu Gln Ala Pro Leu Pro Pro Met Arg Leu Arg Gly Gly Arg Met Thr Leu Gly Ser Cys Arg Glu Arg Gln Pro Glu Phe Val

<210> 3325

<211> 1185

<212> PRT

<213> Homo sapiens

<400> 3325

Met Cys Asn Leu Gln Lys Leu Asn Leu Ala Gly Asn Glu Ile Glu His Ile Pro Val Trp Leu Gly Lys Lys Leu Lys Ser Leu Arg Val Leu Asn Leu Lys Gly Asn Lys Ile Ser Ser Leu Gln Asp Ile Ser Lys Leu Lys Leu Leu Gln Asp Leu Ile Ser Leu Ile Leu Val Glu Asn Pro Val Val Thr Leu Pro His Tyr Leu Gln Phe Thr Ile Phe His Leu Arg Ser Leu Glu Ser Leu Glu Gly Gln Pro Val Thr Thr Gln Asp Arg Gln Glu Ala

				85					90					95	
Phe	Glu	Arg	Phe	Ser	Leu	Glu	Glu	Val	Glu	Arg	Leu	Glu	Arg	Asp	Leu
			100					105					110		
Glu	Lys	Lys	Met	Ile	Glu	Thr	Glu	Glu	Leu	Lys	Ser	Lys	Gln	Thr	Arg
		115					120					125			
Phe	Leu	Glu	Glu	Ile	Lys	Asn	Gln	Asp	Lys	Leu	Asn	Lys	Ser	Leu	Lys
	130					135					140				
Glu	Glu	Ala	Met	Leu	Gln	Lys	Gln	Ser	Cys	Glu	Glu	Leu	Lys	Ser	Asp
145					150					155					160
Leu	Asn	Thr	Lys	Asn	Glu	Leu	Leu	Lys	Gln	Lys	Thr	Ile	Glu	Leu	Thr
				165					170					175	
Arg	Ala	Cys	Gln	Lys	Gln	Tyr	Glu	Leu	Glu	Gln	Glu	Leu	Ala	Phe	Tyr
			180					185					190		
Lys	Ile	Asp	Ala	Lys	Phe	Glu	Pro	Leu	Asn	Tyr	Tyr	Pro	Ser	Glu	Tyr
		195					200					205			
Ala	Glu	Ile	Asp	Lys	Ala	Pro	Asp	Glu	Ser	Pro	Tyr	Ile	Gly	Lys	Ser
	210					215					220				
Arg	Tyr	Lys	Arg	Asn	Met	Phe	Ala	Thr	Glu	Ser	Tyr	Ile	Ile	Asp	Ser
225					230					235					240
Ala	Gln	Ala	Val	Gln	Ile	Lys	Lys	Met	Glu	Pro	Asp	Glu	Gln	Leu	Arg
				245					250					255	
Asn	Asp	His	Met	Asn	Leu	Arg	Gly	His	Thr	Pro	Leu	Asp	Thr	Gln	Leu
			260					265					270		
Glu	Asp	Lys	Glu	Lys	Lys	Ile	Ser	Ala	Ala	Gln	Thr	Arg	Leu	Ser	Glu
		275					280					285			
Leu	His	Asp	Glu	Ile	Glu	Lys	Ala	Glu	Gln	Gln	Ile	Leu	Arg	Ala	Thr
•	290					295					300				
Glu	Glu	Phe	Lys	Gln	Leu	Glu	Glu	Ala	Ile	Gln	Leu	Lys	Lys	Ile	Ser
305					310					315					320

Glu	Ala	Gly	Lys	Asp	Leu	Leu	Tyr	Lys	Gln	Leu	Ser	Gly	Arg	Leu	Gln
				325					330					335	
Leu	Val	Asn	Lys	Leu	Arg	Gln	Glu	Ala	Leu	Asp	Leu	Glu	Leu	Gln	Met
			340					345					350		
Glu	Lys	Gln	Lys	Gln	Glu	Ile	Ala	Gly	Lys	Gln	Lys	Glu	Ile	Lys	Asp
		355					360					365			
Leu	Gln	Ile	Ala	Ile	Asp	Ser	Leu	Asp	Ser	Lys	Asp	Pro	Lys	His	Ser
	370					375					380				
His	Met	Lys	Ala	Gln	Lys	Ser	Gly	Lys	Glu	Gln	Gln	Leu	Asp	Ile	Met
385					390					395					400
Asn	Lys	Gln	Tyr	Gln	Gln	Leu	Glu	Ser	Arg	Leu	Asp	Glu	Ile	Leu	Ser
				405					410					415	
Arg	Ile	Ala	Lys	Glu	Thr	Glu	Glu	Ile	Lys	Asp	Leu	Glu	Glu	Gln	Leu
			420					425					430		
Thr	Glu	Gly	Gln	Ile	Ala	Ala	Asn	Glu	Ala	Leu	Lys	Lys	Asp	Leu	Glu
		435					440					445			
Gly	Val	Ile	Ser	Gly	Leu	Gln	Glu	Tyr	Leu	Gly	Thr	Ile	Lys	Gly	Gln
	450					455					460				
Ala	Thr	Gln	Ala	Gln	Asn	Glu	Cys	Arg	Lys	Leu	Arg	Asp	Glu	Lys	Glu
465					470					475					480
Thr	Leu	Leu	Gln	Arg	Leu	Thr	Glu	Val	Glu	Gln	Glu	Arg	Asp	Gln	Leu
				485					490					495	
Glu	Ile	Val	Ala	Met	Asp	Ala	Glu	Asn	Met	Arg	Lys	Glu	Leu	Ala	Glu
			500					505					510		
Leu	Glu	Ser	Ala	Leu	Gln	Glu	Gln	His	Glu	Val	Asn	Ala	Ser	Leu	Gln
		515					520					525			
Gln	Thr	Gln	Gly	Asp	Leu	Ser	Ala	Tyr	Glu	Ala	Glu	Leu	Glu	Ala	Arg
	530					535					540				
Leu	Asn	Leu	Arg	Asp	Ala	Glu	Ala	Asn	Gln	Leu	Lys	Glu	Glu	Leu	Glu

545					550					555					560
Lys	Val	Thr	Arg	Leu	Thr	Gln	Leu	Glu	Gln	Ser	Ala	Leu	Gln	Ala	Glu
				565					570					575	
Leu	Glu	Lys	Glu	Arg	Gln	Ala	Leu	Lys	Asn	Ala	Leu	Gly	Lys	Ala	Gln
			580					585					590		
Phe	Ser	Glu	Glu	Lys	Glu	Gln	Glu	Asn	Ser	Glu	Leu	His	Ala	Lys	Leu
		595					600					605			
Lys	His	Leu	Gln	Asp	Asp	Asn	Asn	Leu	Leu	Lys	Gln	Gln	Leu	Lys	Asp
	610					615		,			620				
Phe	Gln	Asn	His	Leu	Asn	His	Val	Val	Asp	Gly	Leu	Val	Arg	Pro	Glu
625					630					635					640
Glu	Val	Ala	Ala	Arg	Val	Asp	Glu	Leu	Arg	Arg	Lys	Leu	Lys	Leu	Gly
				645					650					655	
Thr	Gly	Glu	Met	Asn	Ile	His	Ser	Pro	Ser	Asp	Val	Leu	Gly	Lys	Ser
			660	-				665					670		
Leu	Ala	Asp	Leu	Gln	Lys	Gln	Phe	Ser	Glu	Ile	Leu	Ala	Arg	Ser	Lys
		675					680					685			
Trp	Glu	Arg	Asp	Glu	Ala	Gln	Val	Arg	Glu	Arg	Lys	Leu	Gln	Glu	Glu
	690					695					700				
Met	Ala	Leu	Gln	Gln	Glu	Lys	Leu	Ala	Thr	Gly	Gln	Glu	Glu	Phe	Arg
705					710					715					720
Gln	Ala	Cys	Glu	Arg	Ala	Leu	Glu	Ala	Arg	Met	Asn	Phe	Asp	Lys	Arg
				725					730					735	
Gln	His	Glu	Ala	Arg	Ile	Gln	Gln	Met	Glu	Asn	Glu	Ile	His	Tyr	Leu
			740					745					750		
Gln	Glu	Asn	Leu	Lys	Ser	Met	Glu	Glu	Ile	Gln	Gly	Leu	Thr	Asp	Leu
		755					760					765			
Gln	Leu	Gln	Glu	Ala	Asp	Glu	Glu	Lys	Glu	Arg	Ile	Leu	Ala	Gln	Leu
	770					775					780				

Arg	Glu	Leu	Glu	Lys	Lys	Lys	Lys	Leu	Glu	Asp	Ala	Lys	Ser	Gln	Glu
785					790					795					800
Gln	Val	Phe	Gly	Leu	Asp	Lys	Glu	Leu	Lys	Lys	Leu	Lys	Lys	Ala	Val
				805					810					815	
Ala	Thr	Ser	Asp	Lys	Leu	Ala	Thr	Ala	Glu	Leu	Thr	Ile	Ala	Lys	Asp
			820					825					830		
Gln	Leu	Lys	Ser	Leu	His	Gly	Thr	Val	Met	Lys	Ile	Asn	Gln	Glu	Arg
		835					840					845			
Ala	Glu	Glu	Leu	Gln	Glu	Ala	Glu	Arg	Phe	Ser	Arg	Lys	Ala	Ala	Gln
	850					855					860				
Ala	Ala	Arg	Asp	Leu		Arg	Ala	Glu	Ala		Ile	Glu	Leu	Leu	Gln
865					870					875					880
Asn	Leu	Leu	Arg		Lys	Gly	Glu	Gln		Arg	Leu	Glu	Met		Lys
				885					890		_			895	
Thr	Gly	Val		Thr	Gly	Ala	Asn		Gln	Val	Leu	Glu		Glu	Lys
_			900				٠.	905					910	_	
Leu	Asn		Thr	Met	Glu	Arg	Gln	Arg	Thr	Glu	He		Arg	Leu	Gln
	V 7 1	915		T	(T)	0.1	920				0.1	925	DI	01	
Asn		Leu	Asp	Leu	Inr		Ser	Asp	Asn	Lys		Gly	Pne	Glu	Asn
Va I	930	C1	C1	Tla	41 a	935	ī	A	A ~	C1	940	S	Т	Cl _m	Aan
	Leu	Giu	Giu	116		GIU	Leu	Arg	Arg		vai	ser	1 9 1	GIII	
945 Asn	Tur	Πρ	Ser	Ser	950 Mat	Δla	Asp	Pro	Phe	955 Lve	Δrα	Ara	Clv	Tur	960 Trn
nəp	1) 1	116	261	965	MCL	ліа	лор	110	970	гуо	иц	иц	GIY	975	пъ
Tvr	Phe	Met	Pro		Pro	Pro	Ser	Ser		Val	Ser	Ser	Hic	_	Ser
1 y 1	1110	me t	980	110	110	110	501	985	Lys	141	501	001	990	501	
Gln	Ala	Thr		Asn	Ser	Glv	Val		Len	J.ve	Tur	Ser		Ser	Thr
J111	1114	995	ப்	цор	501		1000	Oly	Lea	2,3		1005	ma		****
Pro	Val		Lve	Pro	Arσ		Glv	Gln	Gln	Asp			Glu	Glv	Ser

1020 1010 1015 Gln Pro Pro Pro Ala Ser Gly Tyr Trp Val Tyr Ser Pro Ile Arg Ser 1035 1025 1030 1040 Gly Leu His Lys Leu Phe Pro Ser Arg Asp Ala Asp Ser Gly Gly Asp 1050 1055 1045 Ser Gln Glu Glu Ser Glu Leu Asp Asp Gln Glu Glu Pro Pro Phe Val 1065 1070 1060 Pro Pro Pro Gly Tyr Met Met Tyr Thr Val Leu Pro Asp Gly Ser Pro 1085 1075 1080 Val Pro Gln Gly Met Ala Leu Tyr Ala Pro Pro Pro Pro Leu Pro Asn 1090 1095 1100 Asn Ser Arg Pro Leu Thr Pro Gly Thr Val Val Tyr Gly Pro Pro 1105 1110 1115 1120 Ala Gly Ala Pro Met Val Tyr Gly Pro Pro Pro Pro Asn Phe Ser Ile 1125 1130 1135 Pro Phe Ile Pro Met Gly Val Leu His Cys Asn Val Pro Glu His His 1140 1145 1150

Asn Leu Glu Asn Glu Val Ser Arg Leu Glu Asp Ile Met Gln His Leu 1155 1160 1165

Lys Ser Lys Lys Arg Glu Glu Arg Trp Met Arg Ala Ser Lys Arg Gln 1170 1175 1180

Ser

1185

<210> 3326

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3326 Met Pro Glu Gly Ser Val Ser Ala Met Arg Thr Ser Pro Lys Ser Ser Trp Pro Trp Cys Cys Ser Trp Ser Cys Ala Trp Ser Ser Ser Ser Pro Pro Trp Arg Ser Pro Pro Ser Ala Thr Gly Thr Leu Cys Arg Ser Cys Ser Leu Ala Pro Ser Gly Asp Leu Glu Val Leu Lys Ser Gln Glu Thr Gly Cys Arg Asp Pro Leu Gln Leu Pro Gly Leu Leu Gly Pro Cys Ala Leu Ser Pro Met Val Gly Ser Pro Ser Gly Arg Val Lys Leu Val Gly Arg Arg Ser Val Val Gln Cys Ser Arg Cys Cys Ile Asp Pro Leu Ile Phe Phe Val Phe Val Phe Ile Leu Phe Cys Phe Val Phe Glu Met Glu Ser Cys Ser Val Thr Gln Ala Gly Val Gln Trp Cys Asp Asp Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Ser Cys Leu Ser Leu Pro Gly Ser Trp Asp Tyr Arg His Pro Pro Pro His Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Glu Val Ser Thr Pro Thr Gln Ala Gly Val Lys Leu Leu Thr Ala Ser Asp Leu Pro Thr Leu Ala Ser Gln Ser Val Ala Ile

Thr Gly Val Ser His His Ala Gln Pro Asn Pro Leu Ile Phe Cys Phe

Ser Ser Ser Thr Val Arg Lys Ala Phe Asp Arg Gly Pro Arg Arg Trp

Gln His Gly Gly Leu Thr Val Trp Val Val Val Lys Ala Leu Glu

Ser Gln Leu Gln Arg Glu Asp Val Asp Leu Arg Asp Gly Gln Cys His

Leu His Arg Arg Leu Glu Ala Pro Ala Trp Gly Asn Leu Leu Gly Lys

Glu Gly Ser Lys Arg Gly Thr Met Lys Gln Asn

<210> 3327

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3327

Met Glu Asp Phe Asn Thr Pro Pro Thr Ala Val Ser Arg Leu Val Arg

Gln Ile Ile Arg Gln Lys Thr Asn Asn Glu Thr Val Asp Ser Asn Trp

Ala Leu Asp Gln Thr Asp Leu Ile Asp Ile Tyr Arg Ile Leu His Pro

Glu Thr Thr Glu Cys Thr Phe Phe Ser Phe Ala His Gly Thr Phe Ser

Lys Ile Asp His Met Leu Ser His Lys Ile Ser Leu Asn Lys Phe Leu

Lys Ile Thr Thr Ile Leu Ser Val Phe Ser Asp His Cys Gly Ile Lys Leu Glu Val Asn Ile Lys Asn Ser Gln Asn His Arg Gly Thr Trp Lys Leu Asn Asn Leu Leu Leu Lys Asp Phe Cys Val Asn Asn Arg Ile Lys Ala Glu Ile <210> 3328 <211> 258 <212> PRT <213> Homo sapiens <400> 3328 Met Leu Ser Lys Leu Glu Lys Ser Asp Ser His Gln Phe Arg Val Met Ala Ala Val Leu Arg His Cys Leu Leu Ile Val Gly Pro Thr Glu Asp Lys Thr Glu Glu Leu His Ser Asn Ala Val Asn Leu Leu Ser Asn Val Pro Val Ser Cys Leu Asp Val Leu Ile Cys Pro Leu Thr His Glu Glu Thr Ala Gln Glu Ala Thr Thr Leu Asp Glu Leu Pro Ser Asn Lys Thr

Ala Glu Lys Glu Thr Val Leu Lys Asn Asn Thr Met Val Tyr Asn Gly

Met Asn Met Glu Ala Ile His Val Leu Leu Asn Phe Met Glu Lys Arg

Ile Asp Lys Gly Ser Ser Tyr Arg Glu Gly Leu Thr Pro Val Leu Ser Leu Leu Thr Glu Cys Ser Arg Ala His Arg Asn Ile Arg Lys Phe Leu Lys Asp Gln Val Leu Pro Pro Leu Arg Asp Val Thr Asn Arg Pro Glu Val Gly Ser Thr Val Arg Asn Lys Leu Val Arg Leu Met Thr His Val Asp Leu Gly Val Lys Gln Ile Ala Ala Glu Phe Leu Phe Val Leu Cys Lys Glu Arg Val Asp Ser Leu Leu Lys Tyr Thr Gly Tyr Gly Asn Ala Ala Gly Leu Leu Ala Ala Arg Gly Leu Leu Ala Gly Gly Arg Gly Asp Asn Trp Tyr Ser Glu Asp Glu Asp Thr Asp Thr Glu Glu Tyr Lys Asn Ala Lys Pro Asn Ser Ile Glu Phe Glu Glu Arg Ser His Leu Ser Arg

Gly Lys

<210> 3329

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3329

Met Ala Pro Pro Trp Val Cys Ser Ser Thr Thr Leu Glu Leu Glu Gln Asp Leu Ser Ser Pro Ser Cys Gln Leu Pro Asp Pro Arg Thr Thr Thr Leu Leu His Pro Gly Ser Val Ala Pro Arg Pro Ser Asp Arg Ile Lys Thr Ser Pro Pro Trp Val Ala Ser Phe Arg Thr Leu Lys Leu Gln Gln Asn Cys Ser Ser Leu Gly Arg Gln Leu His Asp Pro His Asn Arg Thr Arg Pro Leu Leu Pro Gly Ser Pro Ala Ser Gly Pro Leu Asn Tyr Asn Lys Ile Ala Pro Pro Trp Val Gly Ser Ser Thr Thr Leu Lys Leu Gln Gln Asp Phe Ser Ser Pro Ser Cys Gln Leu Pro Asp Pro Arg Ile Thr Thr Leu Pro Leu Pro Gly Ser Ala Ala Pro Arg Pro Ser Asp

<210> 3330

<211> 1124

<212> PRT

<213> Homo sapiens

<400> 3330

Met Ser Ser Tyr Phe Trp Ala Gln Asn Glu Ser Asn Arg Pro Asp Leu

1 5 10 15

Leu Cys Gly Gln Pro Ala Asp Tyr Leu Val Glu Glu Lys His Phe Thr

			20					25					30		
Thr	Leu	Val	Cys	Phe	Ile	Val	Val	Leu	Gly	Gly	Leu	Leu	Lys	Met	Cys
		35					40					45			
Leu	Lys	Asn	Cys	Glu	Val	Ile	Val	Leu	Thr	Ile	Leu	Ser	Leu	Ser	Gly
	50					55					60				
Phe	Val	Ile	Gly	His	Met	Ala	Tyr	Asn	Ser	Val	Glu	Val	His	Gln	Ile
65					70					75					80
Val	Tyr	Pro	Leu	Leu	Arg	Thr	Ser	Ser	Phe	Ser	Leu	Tyr	Ser	Tyr	Phe
				85					90					95	
Ser	Pro	Leu	Ile	Ile	Phe	Met	Val	Ala	Leu	Asp	Val	Glu	Phe	Tyr	Thr
			100					105					110		
Leu	Lys	Lys	Met	Phe	Trp	Gln	Val	Leu	Leu	Thr	Gly	Leu	Ile	Ser	Phe
		115					120					125			
Ser	Thr	Ala	Ser	Ile	Ile	Ile	Gly	Tyr	Val	Val	Ile	Lys	Phe	Asn	Lys
	130					135					140				
Asp	Ser	Trp	Asp	Leu	Gln	Ser	Cys	Leu	Leu	Phe	Ser	Ile	Thr	Leu	Gly
145					150					155					160
Ile	Ile	Asp	Pro	Leu	Arg	Ser	Val	Asn		Leu	Lys	Thr	Ile	Gly	Ile
				165					170					175	
Ser	Lys	Ile	Tyr	Ile	Asp	Leu	Ile		Gly	Glu	Ser	Leu		Ile	Cys
			180					185					190		
Ser	Ile		Ser	He	Phe	Phe		Asn	Phe	Arg	Gly		Arg	He	His
	_	195				_	200				0.1	205	0		
Phe		He	Phe	Arg	Asp		His	Val	Gly	He		Leu	Ser	Tyr	Asp
	210	~ -				215		_	_	0	220		. .		0.1
	Leu	Gly	Ser	He	Ile	Phe	Gly	Tyr	Trp		Ala	Lys	He	He	
225	т.		4.1		230	DI	C	Δ.	M	235	TI	Λ	т1.	Tla	240
Cys	He	Leu	Ala	Asp 245	Val	rne	Ser	Asn	Met 250	Leu	ınr	ASN	116	255	Leu
				Z4:)					4.00					400	

Cys	Phe	Ser	Met	Val	Tyr	Met	Thr	Phe	Tyr	Ile	Val	Glu	Phe	Leu	Gly
			260					265					270		
Met	Ser	Gly	Thr	Leu	Ala	Leu	Ala	Ala	Val	Gly	Leu	Asn	Leu	Asp	Ser
		275					280					285			
Leu	Thr	Phe	Lys	Pro	Lys	Ile	Glu	Leu	Val	Ile	Thr	Lys	Phe	Leu	Arg
	290					295					300				
Ile	Phe	Ser	Ser	Val	Tyr	Glu	His	Leu	Ile	Tyr	Ala	Phe	Phe	Gly	Ile
305					310					315					320
Val	Ile	Gly	Cys	Gly	Glu	Leu	Ser	His	Tyr	Glu	Phe	His	Thr	Ile	Pro
				325					330					335	
Phe	Ile	Phe	Ile	Leu	Phe	Thr	Thr	Val	Asn	Leu	Val	Arg	Leu	Leu	Thr
			340					345					350		
Ile	Leu	Leu	Val	Ser	Pro	Ile	Leu	Met	His	Ser	Asn	Tyr	Glu	Tyr	Asn
		355					360					365			
Trp	Arg	Trp	Gly	Val	Val	Ile	Thr	Trp	Ser	Gly	Ile	Lys	Gly	Val	Phe
	370					375					380				
Asn	Leu	Leu	Trp	Ala	Pro	Asp	Val	Tyr	Asn	Leu	Ala	Glu	Arg	Lys	Val
385					390					395					400
Glu	Val	Pro	Gln	Met	Phe	Ile	Leu	Tyr	Val	Gln	Val	Ile	Ser	Leu	Leu
				405					410					415	
Thr	Met	Gly	Ile	Asn	Ser	Tyr	Val	Met	Thr	Gln	Ser	Ala	Arg	Lys	Leu
			420					425					430		
Asp	Leu	Cys	Val	Leu	Ser	Leu	Pro	Arg	Gln	Met	Ile	Leu	Gln	Asn	Ala
		435					440					445			
Thr	Gln	His	Ile	Gln	Glu	Ile	Val	Gln	Asn	Thr	Ile	Thr	Leu	Phe	Lys
	450					455					460				
Thr	Glu	Lys	Ile	Leu	Thr	Asn	Val	Asn	Trp	Thr	Leu	Val	Glu	Asp	Lys
465					470					475					480
Thr	Arg	Ile	Glu	Tvr	Ile	Pro	Phe	Ser	His	Val	Ser	His	Asn	Asp	Met

				485					490					495	
Lys	Thr	Glu	Ser	Thr	Thr	Asp	Glu	Ala	Leu	Met	Glu	Glu	Ala	Arg	Leu
			500					505					510		
His	Val	Ala	Ala	Ile	Gln	Met	Ser	Ser	Phe	Glu	Lys	Gln	Arg	Asn	Asn
		515					520					525			
Gly	Ile	Leu	Glu	Ile	Glu	Ala	Ala	Arg	Ile	Leu	Ile	Gly	Ala	Ala	Lys
	530					535					540				
Cys	Tyr	Tyr	Ser	Ile	Gln	Gly	Lys	Phe	Met	Ser	Ile	Tyr	Asp	Val	Ser
545					550					555					560
Thr	Tyr	Met	Arg	Thr	Arg	Ser	Trp	Leu	Ile	Lys	Phe	Lys	Asn	Val	Leu
				565					570					575	
Thr	Phe	Leu	Glu	Tyr	Cys	Ile	Glu	Lys	Val	His	Phe	Ile	Pro	Pro	Glu
			580					585					590		
Ser	Asn	Thr	Phe	Leu	Thr	Phe	Ile	Phe	His	Ile	Val	Phe	Ser	Glu	Glu
		595					600					605			
Phe	Glu	Tyr	Thr	Gly	Gln	Ile	Ile	Asn	Leu	Ile	Tyr	Ile	Tyr	Pro	Met
	610					615					620				
Ile	Ile	His	Leu	Trp	Pro	Met	Ala	Arg	Gly	Leu	Asn	Val	Ser	Ala	Leu
625					630					635					640
Ile	Ser	Ile	Asn	Tyr	Tyr	Phe	Met	Phe	Leu	Tyr	Val	Leu	Glu	Ser	Thr
				645					650					655	
Leu	Lys	Ile	Ile	Ile	Leu	Lys	Arg	Lys	Tyr	Phe	Gln	Gln	Cys	Trp	Asn
			660					665					670		
Thr	Leu	Glu	Phe	Phe	Ile	Leu	Val	Ile	Gly	Ile	Ile	Asp	Ile	Phe	Cys
		675					680					685			
Val	Tyr	Phe	Val	Lys	Leu	Arg	Pro	Asp	Asn	Leu	Ala	Leu	Ile	Gln	Leu
	690					695					700				
Thr	Val	Ile	Met	Gly	Tyr	Leu	Arg	Ile	Ile	Arg	Phe	Leu	Pro	Leu	Phe
705					710					715					720

Lys	Ile	Ile	Val	Pro	Ile	Leu	Ile	Arg	Ile	Ala	Asp	Val	Gln	Ile	Lys
				725					730					735	
Lys	Arg	Leu	Ser	Leu	Met	Tyr	Ser	Ile	Thr	Lys	Gly	Tyr	Ile	Lys	Ser
			740					745					750		
Gln	Glu	Asp	Ala	Lys	Leu	Leu	Ile	Lys	Gln	Ile	Ala	Val	Cys	Glu	Ser
		755					760					765			
Ile	Tyr	Gln	Lys	Leu	Cys	Glu	Ile	Leu	Glu	Thr	Asn	Lys	Gln	Asp	Ala
	770					775					780				
Val	Lys	Glu	Leu	Val	Leu	Met	Glu	His	Glu	Gly	Arg	Asp	Val	Val	Ile
785					790					795					800
Ala	Leu	Lys	Thr	Lys	Gln	Ala	Ile	Arg	Asn	Val	Ile	Ala	Lys	Ala	Leu
				805					810					815	
Lys	Asn	Leu	Thr	Phe	Leu	Cys	Ser	Arg	Gly	Ile	Ile	Asp	Lys	His	Glu
			820					825					830		
Val	Ile	Glu	Ile	Asn	Lys	Val	Leu	Leu	Lys	Lys	Leu	Lys	Ala	Leu	Asn
		835					840					845			
Asn	Phe	Pro	Lys	Ala	Ile	Pro	Pro	Pro	Thr	Pro	Asp	Ile	Tyr	Leu	His
	850					855					860				
Asn	Ile	Ile	Trp	Leu	Glu	Gly	Lys	Asp	Val	Leu	Ile	Asp	Phe	Phe	Lys
865					870					875					880
Glu	Arg	Ala	Lys	Leu	Ala	Cys	Phe	Asp	Ser	Gly	Asp	Thr	Ile	Cys	Lys
				885					890					895	
Gly	Gly	Glu	Met	Pro	Gln	Gly	Ile	Tyr	Leu	Ile	Ile	Ser	Gly	Met	Ala
			900					905					910		
Ile	Leu	His	Ser	Leu	Ser	Pro	Thr	Phe	Gly	Ile	Glu	Ser	Asn	Gln	Arg
		915					920					925			
Cys	Asp	Arg	Gly	Ser	Arg	Asp	Met	Phe	Thr	Glu	Phe	Cys	Thr	Thr	Gly
	930					935					940				
Asp	He	Ile	Glv	Glu	Leu	Ser	Cvs	Leu	Leu	Lys	Arg	Glu	Ile	Glu	Tyr

Thr Val Ile Cys Glu Thr Ser Leu Gln Ala Cys Phe Ile Ser Leu Glu Asp Leu Tyr Glu Gly Phe Asp Ala Phe Trp Pro Ser Leu Glu Tyr Lys Ile Trp Leu Lys Leu Ala Leu Ser Thr Ala Tyr Gln Tyr Phe Glu Ser Ser Leu Ile Asp Glu Asp Leu Arg Phe Gln Asn Cys Val Met Phe Asn Gln Ala Tyr Val Glu Thr Leu Ser Ser Tyr Ser Asp Met Ile Ile Asp Asn Met Thr Met Lys Phe Val Ile Ile Val Tyr Gly Ser Val Ile Asp Thr Lys Thr Glu Glu Pro Tyr Phe Ala Pro Cys Ile Ile Pro Thr Thr Cys Glu Gln Val Gln Gly Thr Ser Asp Leu Ser Lys Leu Leu Ile Ile Gln Ala Ser Glu Leu Thr Gln Arg Asn Ser Asn Thr Asn Val Met Ala Ser Val Asn Thr Val Phe Glu Gln Pro Gly Lys Asn Ile Asn Gly Arg

<210> 3331

Gln Lys Met Ser

<211> 305

<212> PRT

<213> Homo sapiens

<400> 3331 Met Asp Asn Arg Asn Thr Gln Met Tyr Thr Glu Gly Arg Thr Lys Ala Pro Gly Thr Gln Pro Ser Pro Gly Leu Arg Ile Thr Ile Lys Arg Ala Gly Val Glu Pro Ile Ile Pro Gly Val Ser Lys Val Met Phe Pro Asp Ala Ser Glu Val Gly Ser Lys Lys His Leu Ser Ser Ala Ser Arg Gly Pro Glu Lys Gly Pro Arg Leu Arg Asp Ala Phe Glu Lys Gly Pro Ser Glu Leu Arg Ile Gln Glu Gln Gly Pro Pro Ala Arg Pro Gly Lys Lys Gln Pro Ser Trp Val Pro Gln Glu Gly Ser Gln Glu Leu Gln Ala Gly Gln Asp Gln Ser Glu Leu Gly Leu Leu Pro Ser Trp Val Pro Glu Val Pro Glu Gly Leu Gln Gln Leu Gly Ser Gly Lys Glu Ile Lys Gly Gln Gln Gly Arg Gln Arg Asn Arg Gly Ile Gly Glu Asp Gln Pro Pro Glu Ser Cys Gln Gly Ser Gly Tyr Gln Ser Thr Pro Ser His Gln Ala Asp Met Val Gln Pro Ala Glu Pro Cys Cys Arg Leu Ala Ser His Gly Gln Pro Leu Gly Gly Lys His Pro Lys Glu Ala Gly Val Pro His Ile Arg

Pro Gln Glu Ala Pro Pro Glu Pro Ser Pro Gly Gly His Gly Asp Ser

Ser Gln Glu Ala Met Pro Pro Met Ser Val Val Ala Pro Glu Glu Lys Thr Val Asn Pro Phe Leu Pro Ser Thr Pro Gly Pro Lys Lys Ala Lys Gly Gly Arg Ala Asp Asn Arg His Glu Gln Ser Gln Val Val Gly Pro Gly Val Thr His Ser Arg Pro Trp Leu Ser Arg Ala Arg Trp Asn Thr Leu Val Ile Pro Ala Leu Trp Glu Ala Lys Ala Glu Asp His Leu Arg Arg <210> 3332 <211> 891 <212> PRT <213> Homo sapiens <400> 3332 Met Thr Ala Ile Leu Asn Gln Met Gly Asp Gln His Tyr Ser Phe Tyr Ile Glu Thr Phe Gln Thr Ser Ser Glu Leu Val Asp Phe Leu Met Glu Thr Phe Ile Met Phe Lys Asp Leu Ile Gly Lys Asn Val Tyr Pro Gly

Asp Trp Met Ala Met Ser Met Val Gln Asn Arg Val Phe Leu Arg Ala

Ile	Asn	Lys	Phe	Ala	Glu	Thr	Met	Asn	Gln	Lys	Phe	Leu	Glu	His	Thr
65					70					75					80
Asn	Phe	Glu	Phe	Gln	Leu	Trp	Asn	Asn	Tyr	Phe	His	Leu	Ala	Val	Ala
				85					90					95	
Phe	Ile	Thr	Gln	Asp	Ser	Leu	Gln	Leu	Glu	Gln	Phe	Ser	His	Ala	Lys
			100					105					110		
Tyr	Asn	Lys	Ile	Leu	Asn	Lys	Tyr	Gly	Asp	Met	Arg	Arg	Leu	Ile	Gly
		115					120					125			
Phe	Ser	Ile	Arg	Asp	Met	Trp	Tyr	Lys	Leu	Gly	Gln	Asn	Lys	Ile	Cys
	130					135					140				
Phe	Ile	Pro	Gly	Met	Val	Gly	Pro	Ile	Leu	Glu	Met	Thr	Leu	Ile	Pro
145	•				150					155					160
Glu	Ala	Glu	Leu	Arg	Lys	Ala	Thr	Ile	Pro	Ile	Phe	Phe	Asp	Met	Met
				165					170					175	
Leu	Cys	Glu	Tyr	Gln	Arg	Ser	Gly	Asp	Phe	Lys	Lys	Phe	Glu	Asn	Glu
			180					185					190		
Ile	Ile	Leu	Lys	Leu	Asp	His	Glu	Val	Glu	Gly	Gly	Arg	Gly	Asp	Glu
		195					200					205			
Gln	Tyr	Met	Gln	Leu	Leu	Glu	Ser	Ile	Leu	Met	Glu	Cys	Ala	Ala	Glu
	210					215					220				
His	Pro	Thr	Ile	Ala	Lys	Ser	Val	Glu	Asn	Phe	Val	Asn	Leu	Val	Lys
225					230					235					240
Gly	Leu	Leu	Glu	Lys	Leu	Leu	Asp	Tyr	Arg	Gly	Val	Met	Thr	Asp	Glu
				245					250					255	
Ser	Lys	Asp	Asn	Arg	Met	Ser	Cys	Thr	Val	Asn	Leu	Leu	Asn	Phe	Tyr
			260					265					270		
Lys	Asp	Asn	Asn	Arg	Glu	Glu	Met	Tyr	Ile	Arg	Tyr	Leu	Tyr	Lys	Leu
		275					280					285			
Arg	Asp	Leu	His	Leu	Asp	Cvs	Asp	Asn	Tvr	Thr	Glu	Ala	Ala	Tvr	Thr

	290					295					300				
Leu	Leu	Leu	His	Thr	Trp	Leu	Leu	Lys	Trp	Ser	Asp	Glu	Gln	Cys	Ala
305					310					315					320
Ser	Gln	Val	Met	Gln	Thr	Gly	Gln	Gln	His	Pro	Gln	Thr	His	Arg	Gln
				325					330					335	
Leu	Lys	Glu	Thr	Leu	Tyr	Glu	Thr	Ile	Ile	Gly	Tyr	Phe	Asp	Lys	Gly
			340					345					350		
Lys	Met	Trp	Glu	Glu	Ala	Ile	Ser	Leu	Cys	Lys	Glu	Leu	Ala	Glu	Gln
		355					360					365			
Tyr	Glu	Met	Glu	Ile	Phe	Asp	Tyr	Glu	Leu	Leu	Ser	Gln	Asn	Leu	Ile
	370					375					380				
Gln	Gln	Ala	Lys	Phe	Tyr	Glu	Ser	Ile	Met	Lys	Ile	Leu	Arg	Pro	Lys
385					390					395					400
Pro	Asp	Tyr	Phe	Ala	Val	Gly	Tyr	Tyr	Gly	Gln	Gly	Phe	Pro	Ser	Phe
				405					410					415	
Leu	Arg	Asn	Lys	Val	Phe	Ile	Tyr	Arg	Gly	Lys	Glu	Tyr	Glu	Arg	Arg
			420					425					430		
Glu	Asp	Phe	Gln	Met	Gln	Leu	Met	Thr	Gln	Phe	Pro	Asn	Ala	Glu	Lys
		435					440					445			
Met	Asn	Thr	Thr	Ser	Ala	Pro	Gly	Asp	Asp	Val	Lys	Asn	Ala	Pro	Gly
	450					455					460				
Gln	Tyr	Ile	Gln	Cys	Phe	Thr	Val	Gln	Pro	Val	Leu	Asp	Glu	His	Pro
465					470					475					480
Arg	Phe	Lys	Asn	Lys	Pro	Val	Pro	Asp	Gln	Ile	Ile	Asn	Phe	Tyr	Lys
				485					490					495	
Ser	Asn	Tyr	Val	Gln	Arg	Phe	His	Tyr	Ser	Arg	Pro	Val	Arg	Arg	Gly
			500					505					510		
Thr	Val	Asp	Pro	Glu	Asn	Glu	Phe	Ala	Ser	Met	Trp	Ile	Glu	Arg	Thr
		515					520					525			

Ser	Phe	Val	Thr	Ala	Tyr	Lys	Leu	Pro	Gly	Ile	Leu	Arg	Trp	Phe	Glu
	530					535					540				
Val	Val	His	Met	Ser	Gln	Thr	Thr	Ile	Ser	Pro	Leu	Glu	Asn	Ala	Ile
545					550					555					560
Glu	Thr	Met	Ser	Thr	Ala	Asn	Glu	Lys	Ile	Leu	Met	Met	Ile	Asn	Gln
				565					570					575	
Tyr	Gln	Ser	Asp	Glu	Thr	Leu	Pro	Ile	Asn	Pro	Leu	Ser	Met	Leu	Leu
			580					585					590		
Asn	Gly	Ile	Val	Asp	Pro	Ala	Val	Met	Gly	Gly	Phe	Ala	Lys	Tyr	Glu
		595					600					605			
Lys	Ala	Phe	Phe	Thr	Glu	Glu	Tyr	Val	Arg	Asp	His	Pro	Glu	Asp	Gln
	610					615					620				
Asp	Lys	Leu	Thr	His	Leu	Lys	Asp	Leu	Ile	Ala	Trp	Gln	Ile	Pro	Phe
625					630					635					640
Leu	Gly	Ala	Gly	Ile	Lys	Ile	His	Glu	Lys	Arg	Val	Ser	Asp	Asn	Leu
				645					650					655	
Arg	Pro	Phe	His	Asp	Arg	Met	Glu	Glu	Cys	Phe	Lys	Asn	Leu	Lys	Met
			660					665					670		
Lys	Val	Glu	Lys	Glu	Tyr	Gly	Val	Arg	Glu	Met	Pro	Asp	Phe	Asp	Asp
		675					680					685			
Arg	Arg	Val	Gly	Arg	Pro	Arg	Ser	Met	Leu	Arg	Ser	Tyr	Arg	Gln	Met
	690					695					700				
Ser	Ile	Ile	Ser	Leu	Ala	Ser	Met	Asn	Ser	Asp	Cys	Ser	Thr	Pro	Ser
705					710					715					720
Lys	Pro	Thr	Ser	Glu	Ser	Phe	Asp	Leu	Glu	Leu	Ala	Ser	Pro	Lys	Thr
				725					730					735	
Pro	Arg	Val	Glu	Gln	Glu	Glu	Pro	Ile	Ser	Pro	Gly	Ser	Thr	Leu	Pro
			740					745					750		
Glu	Val	Lys	Leu	Arg	Arg	Ser	Lys	Lys	Arg	Thr	Lys	Arg	Ser	Ser	Val

Val Phe Ala Asp Glu Lys Ala Ala Ala Glu Ser Asp Leu Lys Arg Leu Ser Arg Lys His Glu Phe Met Ser Asp Thr Asn Leu Ser Glu His Ala Ala Ile Pro Leu Lys Ala Ser Val Leu Ser Gln Met Ser Phe Ala Ser Gln Ser Met Pro Thr Ile Pro Ala Leu Ala Leu Ser Val Ala Gly Ile Pro Gly Leu Asp Glu Ala Asn Thr Ser Pro Arg Leu Ser Gln Thr Phe Leu Gln Leu Ser Asp Gly Asp Lys Lys Thr Leu Thr Arg Lys Lys Val Asn Gln Phe Phe Lys Thr Met Leu Ala Ser Lys Ser Ala Glu Glu Gly Lys Gln Ile Pro Asp Ser Leu Ser Thr Asp Leu

<210> 3333

<211> 1423

<212> PRT

<213> Homo sapiens

<400> 3333

Met Leu Thr Pro Lys Phe Leu Ala Phe Pro His His Pro Met Gly Met

1 5 10 15

Leu Tyr Arg Tyr Lys Val Gln Val Glu Gly Gly Ser Gly Asn Phe Thr
20 25 30

Trp	Thr	Ser	Ser	Asn	Glu	Thr	Val	Val	Ile	Val	Thr	Thr	Lys	Gly	Val
		35					40					45			
Val	Thr	Ala	Gly	Gln	Val	Arg	Gly	Asn	Ser	Thr	Val	Leu	Ala	Arg	Asp
	50					55					60				
Val	Gln	Asn	Pro	Phe	Arg	Tyr	Gly	Glu	Ile	Lys	Ile	His	Val	Leu	Lys
65					70					75					80
Leu	Asn	Lys	Met	Glu	Leu	Leu	Pro	Phe	His	Ala	Asp	Val	Glu	Ile	Gly
				85					90					95	
Gln	Ile	Ile	Glu	Ile	Pro	Ile	Ala	Met	Tyr	His	Ile	Asn	Lys	Glu	Thr
			100					105					110		
Lys	Glu	Ala	Met	Ala	Phe	Thr	Asp	Cys	Ser	His	Leu	Ser	Leu	Asp	Leu
		115					120					125			
Asn	Met	Asp	Lys	Gln	Gly	Val	Phe	Thr	Leu	Leu	Lys	Glu	Gly	Ile	Glr
	130					135					140				
Arg	Pro	Gly	Pro	Met	His	Cys	Ser	Ser	Thr	His	Ile	Ala	Ala	Lys	Ser
145					150					155					160
Leu	Gly	His	Thr	Leu	Val	Thr	Val	Ser	Val	Asn	Glu	Cys	Asp	Lys	Tyr
				165					170					175	
Leu	Glu	Ser	Ser	Ala	Thr	Phe	Ala	Ala	Tyr	Glu	Pro	Leu	Lys	Ala	Leu
			180					185					190		
Asn	Pro	Val	Glu	Val	Ala	Leu	Val	Thr	Trp	Gln	Ser	Val	Lys	Glu	Met
		195					200					205			
Val	Phe	Glu	Gly	Gly	Pro	Arg	Pro	Trp	Ile	Leu	Glu	Pro	Ser	Arg	Phe
	210					215					220				
Phe	Leu	Glu	Leu	Asn	Ala	Glu	Lys	Thr	Glu	Lys	Ile	Gly	Ile	Ala	Glr
225					230					235					240
Val	Trp	Leu	Pro	Ser	Lys	Arg	Lys	Gln	Asn	Gln	Tyr	Ile	Tyr	Arg	Ιlϵ
				245					250					255	
Gln	Cys	Leu	Asp	Leu	Gly	Glu	Gln	Val	Leu	Thr	Phe	Arg	Ile	Gly	Asr

			260					265					270		
His	Pro	Gly	Val	Leu	Asn	Pro	Ser	Pro	Ala	Val	Glu	Val	Leu	Gln	Val
		275					280					285			
Arg	Phe	Ile	Cys	Ala	His	Pro	Ala	Ser	Met	Ser	Val	Thr	Pro	Val	Tyr
	290					295					300				
Lys	Val	Pro	Ala	Gly	Ala	Gln	Pro	Cys	Pro	Leu	Pro	Gln	His	Asn	Lys
305					310					315					320
Trp	Leu	Ile	Pro	Val	Ser	Arg	Leu	Arg	Asp	Thr	Val	Leu	Glu	Leu	Ala
				325					330					335	
Val	Phe	Asp	Gln	His	Arg	Arg	Lys	Phe	Asp	Asn	Phe	Ser	Ser	Leu	Met
			340					345					350		
Leu	Glu	Trp	Lys	Ser	Ser	Asn	Glu	Thr	Leu	Ala	His	Phe	Glu	Asp	Tyr
		355					360					365			
Lys	Ser	Val	Glu	Met	Val	Ala	Lys	Asp	Asp	Gly	Ser	Gly	Gln	Thr	Arg
	370					375					380				
Leu	His	Gly	His	Gln	Ile	Leu	Lys	Val	His	Gln	Ile	Lys	Gly	Thr	Val
385					390					395					400
Leu	Ile	Gly	Val	Asn	Phe	Val	Gly	Tyr	Ser	Glu	Lys	Lys	Ser	Pro	Lys
				405					410					415	
Glu	Ile	Ser	Asn	Leu	Pro	Arg	Ser	Val	Asp	Val	Glu	Leu	Leu	Leu	Val
			420					425					430		
Gly	Asp	Val	Thr	Val	Val	Pro	Glu	Asn	Ala	Thr	Ile	Tyr	Asn	His	Pro
		435					440					445			
Asp	Val	Lys	Glu	Thr	Phe	Ser	Leu	Val	Glu	Gly	Ser	Gly	Tyr	Phe	Leu
	450					455					460				
Val	Asn	Ser	Ser	Glu	Gln	Gly	Val	Val	Thr	Ile	Thr	Tyr	Met	Glu	Ala
465					470					475					480
Glu	Ser	Ser	Val	Glu	Leu	Val	Pro	Leu	His	Pro	Gly	Phe	Phe	Thr	Leu
				485					490					495	

Glu	Val	Tyr	Asp	Leu	Cys	Leu	Ala	Phe	Leu	Gly	Pro	Ala	Thr	Ala	His
			500					505					510		
Leu	Arg	Val	Ser	Asp	Ile	Gln	Glu	Leu	Glu	Leu	Asp	Leu	Ile	Asp	Lys
		515					520					525			
Val	Glu	Ile	Asp	Lys	Thr	Val	Leu	Val	Thr	Val	Lys	Val	Leu	Gly	Ser
	530					535					540				
Ser	Lys	Arg	Pro	Phe	Gln	Asn	Lys	Tyr	Phe	Arg	Asn	Met	Glu	Leu	Lys
545					550					555					560
Leu	Gln	Leu	Ala	Ser	Ala	Ile	Val	Thr	Leu	Thr	Pro	Met	Glu	Gln	Gln
				565					570					575	
Asp	Glu	Tyr	Ser	Glu	Asn	Tyr	Ile	Leu	Arg	Ala	Thr	Thr	Ile	Gly	Glr
			580					585					590		
Thr	Thr	Leu	Val	Ala	Ile	Ala	Lys	Asp	Lys	Met	Gly	Arg	Lys	Tyr	Thr
		595					600					605			
Ser	Thr	Pro	Arg	His	Ile	Glu	Val	Phe	Pro	Pro	Phe	Arg	Leu	Leu	Pro
	610					615					620				
Glu	Lys	Met	Thr	Leu	Ile	Pro	Met	Asn	Met	Met	Gln	Val	Met	Ser	Glu
625					630					635					640
Gly	Gly	Pro	Gln	Pro	Gln	Ser	Ile	Val	His	Phe	Ser	Ile	Ser	Asn	Glr
				645					650					655	
Thr	Val	Ala	Val	Val	Asn	Arg	Arg	Gly	Gln	Val	Thr	Gly	Lys	Ile	Val
			660					665					670		
Gly	Thr	Ala	Val	Val	His	Gly	Thr	Ile	Gln	Thr	Val	Asn	Glu	Asp	Thr
		675					680					685			
Gly	Lys	Val	Ile	Val	Phe	Ser	Gln	Asp	Glu	Val	Gln	Ile	Glu	Val	Val
	690					695					700				
Gln	Leu	Arg	Ala	Val	Arg	Ile	Leu	Ala	Ala	Ala	Thr	Arg	Leu	Ile	Thi
705					710					715					720
Ala	Thr	Lys	Met	Pro	Val	Tyr	Val	Met	Gly	Val	Thr	Ser	Thr	Gln	Thi

				725					730					735	
Pro	Phe	Ser	Phe	Ser	Asn	Ala	Asn	Pro	Gly	Leu	Thr	Phe	His	Trp	Ser
			740					745					750		
Met	Ser	Lys	Arg	Asp	Val	Leu	Asp	Leu	Val	Pro	Arg	His	Ser	Glu	Val
		755					760					765			
Phe	Leu	Gln	Leu	Pro	Val	Glu	His	Asn	Phe	Ala	Met	Val	Val	His	Thr
	770					775					780				
Lys	Ala	Ala	Gly	Arg	Thr	Ser	Ile	Lys	Val	Thr	Val	His	Cys	Met	Asn
785					790					795					800
Ser	Ser	Ser	Gly	Gln	Phe	Glu	Gly	Asn	Leu	Leu	Glu	Leu	Ser	Asp	Glu
				805					810					815	
Val	Gln	Ile	Leu	Val	Phe	Glu	Lys	Leu	Gln	Leu	Phe	Tyr	Pro	Glu	Cys
			820					825					830		
Gln	Pro	Glu	Gln	Ile	Leu	Met	Pro	Ile	Asn	Ser	Gln	Leu	Lys	Leu	His
		835					840					845			
Thr	Asn	Arg	Glu	Gly	Ala	Ala	Phe	Val	Ser	Ser	Arg	Val	Leu	Lys	Cys
	850					855					860				
Phe	Pro	Asn	Ser	Ser	Val	Ile	Glu	Glu	Asp	Gly	Glu	Gly	Leu	Leu	Lys
865					870					875					880
Ala	Gly	Ser	Ile	Ala	Gly	Thr	Ala	Val	Leu	Glu	Val	Thr	Ser	Ile	Glu
				885					890					895	
Pro	Phe	Gly	Val	Asn	Gln	Thr	Thr	Ile	Thr	Gly	Val	Gln	Val	Ala	Pro
			900					905					910		
Val	Thr	Tyr	Leu	Arg	Val	Ser	Ser	Gln	Pro	Lys	Leu	Tyr	Thr	Ala	Gln
		915					920					925			
Gly	Arg	Thr	Leu	Ser	Ala	Phe	Pro	Leu	Gly	Met	Ser	Leu	Thr	Phe	Thr
	930					935					940				
Val	Gln	Phe	Tyr	Asn	Ser	Ile	Gly	Glu	Lys	Phe	His	Thr	His	Asn	Thr
945					950					955					960

Gln Leu Tyr	Leu Ala	Leu Asn	Arg	Asp A	Asp Le	eu Leu	His	Ile	Gly	Pro
	965			g	970				975	
Gly Asn Lys	Asn Tyr	Thr Tyr	Met	Ala (Gln Al	la Val	Asn	Arg	Gly	Leu
	980		9	985				990		
Thr Leu Val	Gly Leu	Trp Asp	Arg	Arg b	dis Pı	ro Gly	Met	Ala	Asp	Tyr
995			1000]	1005			
Ile Pro Val	Ala Val	Glu His	Ala	Ile (Glu Pi	ro Asp	Thr	Lys	Leu	Thr
1010		1015				1020				
Phe Val Gly	Asp Ile	Ile Cys	Phe S	Ser 7	Thr Hi	is Leu	Val	Ser	Gln	His
1025		1030			103	35]	1040
Gly Glu Pro	Gly Ile	Trp Met	Ile	Ser A	Ala As	sn Asn	Ile	Leu	Gln	Thr
	1045			10	050			1	1055	
Asp Ile Val	Thr Gly	Val Gly	Val .	Ala A	Arg Se	er Pro	Gly	Thr	Ala	Met
	1060		1	065]	1070		
Ile Phe His	Asp Ile	Pro Gly	Val	Val I	Lys Tł	nr Tyr	Arg	Glu	Val	Val
1075			1080				1085			
Val Asn Ala	Ser Ser	Arg Leu	Met 3	Leu S	Ser Ty	yr Asp	Leu	Lys	Thr	Tyr
1090		1095				1100				
Leu Thr Asn	Thr Leu	Asn Ser	Thr	Val F	Phe Ly	ys Leu	Phe	Ile	Thr	Thr
1105		1110			113	15]	1120
Gly Arg Asn	Gly Val	Asn Leu	Lys	Gly F	Phe Cy	ys Thr	Pro	Asn	Gln	Ala
	1125			11	130]	1135	
Leu Ala Ile	Thr Lys	Val Leu	Leu :	Pro A	Ala Th	nr Leu	Met	Leu	Cys	His
	1140		1	145]	150	-	
Val Gln Phe	Ser Asn	Thr Leu	Leu .	Asp]	Ile P	ro Ala	Ser	Lys	Val	Phe
1155			1160				1165			
Gln Val His	Ser Asp	Phe Ser	Met	Glu I	Lys G	ly Val	Tyr	Val	Cys	Ile
1170		1175				1180				
Ile Lys Val	Arg Pro	Gln Ser	Glu	Glu I	Leu Le	eu Gln	Ala	Leu	Ser	Val

1185				1190					1195]	1200
Ala As	p Thr	Ser	Val	Tyr	Gly	Trp	Ala	Thr	Leu	Val	Ser	Glu	Arg	Ser
			1205					1210]	1215	
Lys As	n Gly	Met	Arg	Arg	Ile	Leu	Ile	Pro	Phe	Ile	Pro	Ala	Phe	Tyr
		1220				-	1225					1230		
Ile As	n Gln	Ser	Glu	Leu	Val	Leu	Ser	His	Lys	Gln	Asp	Ile	Gly	Glu
	1235				-	1240					1245			
Ile Ar	g Val	Leu	Gly	Val	Asp	Arg	Val	Leu	Arg	Lys	Leu	Glu	Val	Ile
125	0				1255					1260				
Ser Se	er Ser	Pro	Val	Leu	Val	Val	Ala	Gly	His	Ser	His	Ser	Pro	Leu
1265				1270					1275]	1280
Thr Pr	o Gly	Leu	Ala	Ile	Tyr	Ser	Val	Arg	Val	Val	Asn	Phe	Thr	Ser
			1285					1290]	1295	
Phe Gl	n Gln	Met	Ala	Ser	Pro	Val	Phe	Ile	Asn	Ile	Ser	Cys	Val	Leu
		1300					1305					1310		
Thr Se	er Gln	Ser	Glu	Ala	Val	Val	Val	Arg	Ala	Met	Lys	Asp	Lys	Leu
	1315					1320					1325			
Gly Al	a Asp	His	Cys	Glu	Asp	Ser	Ala	Ile	Leu	Lys	Arg	Phe	Thr	Gly
133	80				1335					1340				
Ser Ty	r Gln	Ile	Leu	Leu	Leu	Thr	Leu	Phe	Ala	Val	Leu	Ala	Ser	Thr
1345				1350					1355					1360
Ala Se	er Ile	Phe	Leu	Ala	Tyr	Asn	Ala	Phe	Leu	Asn	Lys	Ile	Gln	Thr
			1365					1370					1375	
Val Pı	o Val	Val	Tyr	Val	Pro	Thr	Leu	Gly	Thr	Pro	Gln	Pro	Gly	Phe
		1380					1385					1390		
Phe As	sn Ser	Thr	Ser	Ser	Pro	Pro	His	Phe	Met	Ser	Leu	Gln	Pro	Pro
	1395					1400					1405			
Leu Al	a Gln	Ser	Arg	Leu	Gln	His	Trp	Leu	Trp	Ser	Ile	Arg	His	
14	.0				1415					1420				

<210> 3334

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3334

Met Gln Val Leu His Gly His Gln Phe Ser Asn Gln Trp Asp Gln Ser

1 5 10 15

Leu Arg Ile Phe Trp Asp Met Trp His Glu Ser Thr Glu Phe Arg Ala

20 25 30

Glu Pro Pro Asn Gly Phe Pro Lys Gly Leu Cys Pro Val Ala Phe Pro

35 40 45

Pro Gly Arg Asp Lys Gly Pro Arg Asp Arg Thr Ser Ser Arg His Leu

50 55 60

Val Ser Ser Val Trp Leu Gly Lys Ala Pro Glu Pro Leu Ile Leu Pro

65 70 75 80

Pro Ser Arg Arg Leu Leu Asn Phe Pro Pro Phe Leu Met Ile Leu Phe

85 90 95

Ile Ala Leu Cys Leu Leu Gly Ser His Leu Gly Ser Gly Pro Thr Tyr

100 105 110

Pro Ser Gln Ala Gln Gly Leu Gln Pro Gly Arg His Ser Val Tyr Cys

115 120 125

Ala Ser Cys Ser Leu Gly Leu Glu Ser Phe Trp

130 135

<210> 3335

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3335

Met Ile Pro His Ser Leu Ile Ala Leu Asn Thr Ile His Leu Leu Ile

1 5 10 15

Thr Thr Arg Leu Gly Ala Ser Ser Leu Arg Gly Ala Pro Arg Val Phe

20 25 30

Pro Asp Ser Phe Pro Phe Ala Pro Asn Pro His Ala Thr Ile Gln Gln

35 40 45

Val Leu Trp Leu Leu Ser Ala Thr Ser Asn Leu Ile His His Leu His

50 55 60

Phe His Asn Gln Phe Gln Ser Ser Ser Ser Pro Thr Gly Leu Leu Pro

65 70 75 80

Lys Ile Leu Leu Pro Lys Ile Leu Gln Pro Pro Cys Ile Leu Ser

85 90 95

Cys Pro Pro Ala Val Gln Pro Pro Leu Lys His Pro Glu

100 105

<210> 3336

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3336

Met Ile Phe Pro Tyr Leu Arg Val Gln Glu Lys Glu Cys Arg Thr Gln

1

5

10

Lys Ser Leu Gln Ile Ser Glu Val Cys Thr His Cys Asn Ile Thr Ile Ser Ala Ser Phe Cys Leu Ile Leu Asp Ile Cys Ser Leu Leu Thr Glu Ser Lys Ser Val Asn Tyr Gln Ile Gln Ser Asn His Gly Ser Ser Pro Val Ser Val Val Thr Ser Lys Pro Ser Ser Asp Gln Lys Phe Ala Gln Thr Arg Phe Gln Thr Glu Ile Cys Arg Ala Ser Glu Ser Gln Arg Glu Leu Thr Thr Ile Ser Val Ala Ser Arg Lys Gln Trp Thr Ser

<210> 3337

<211> 215

<212> PRT

<213> Homo sapiens

<400> 3337

Met Ala Ser Gly Arg Trp Ala Ser Pro Gly Pro Ala Trp Ala Ser Arg

Arg Pro Leu Gln Ala Gln Val Val Leu Lys Ser Ala Ser Pro Gly Pro

Ala Pro Ala Ser Gln Gln Ala Ser Ser Phe Gly Ser Ala Pro Ala Gln

Leu Pro Pro Ala Phe Val Asp Pro Glu Leu Ser Pro Ala Met Leu Leu

Ser Pro Thr Cys Leu Pro Val Ala Cys Thr Gly Pro Gly Leu Ala Gly

Glu Gln Pro Leu Gln Ala Pro Leu Leu Pro Pro Arg Gly Ile Ser Arg Pro Ser Ser Gly Leu Thr Ala Ala Ser Arg Asp Gln Val Pro Ala Cys Leu Pro Ala Ala Cys Val Arg Pro Ser Ser Ser Val Thr Val Ala Cys Ser Gly Pro Thr His Ala Ser Gly Thr Leu Ser Arg Gly Val Ser Pro Cys Leu Thr Leu Ala Ser Leu Thr Leu Arg Glu Phe Ser Val Gly Pro Cys Leu Thr Leu Ala Ser Leu Thr Leu Arg Glu Val Ser Met Ser Pro Cys Leu Thr Leu Val Ser Leu Thr Leu Arg Ala Ile Leu Pro His Ala Gly Leu Leu Arg Pro Ser Ser Cys Leu Cys Trp Pro Phe Gln Ala Gln Pro Leu Pro Val Gly Gly Leu

<210> 3338

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3338

Met Glu Ser Cys Phe Val Thr Gln Ala Gly Val Gln Trp Pro Asp Leu

1 5 10 15

S	er	Ser	Leu	Gln	Pro	Pro	Leu	Pro	Val	Phe	Lys	Gln	Phe	Ser	Ala	Ser
				20					25					30		
A	la	Ser	Arg	Val	Ala	Gly	Ile	Thr	Gly	Ala	Cys	His	His	Ala	Trp	Leu
			35					40					45			
Ι	le	Phe	Val	Phe	Leu	Val	Glu	Thr	Gly	Phe	Arg	His	Val	Ser	Gln	Ala
		50					55					60				
G	ly	Leu	Glu	Leu	Leu	Ala	Ser	Gly	Asp	Pro	Val	Cys	Leu	Gly	Phe	Pro
																~ ~
	65					70					75					80
		Cys	Trp	Asp	Tyr	70 Arg	Arg	Glu	Pro	Leu		Pro	Pro	Arg	Phe	
		Cys	Trp	Asp	Tyr 85		Arg	Glu	Pro	Leu 90		Pro	Pro	Arg	Phe 95	
L	ys				85					90	Arg				95	Ser
L	ys				85	Arg				90	Arg				95	Ser
L	ys eu			Pro	85	Arg			Val	90	Arg			Lys	95	Ser
L	ys eu	Phe		Pro	85	Arg			Val	90	Arg			Lys	95	Ser

<210> 3339

<211> 358

<212> PRT

<213> Homo sapiens

<400> 3339

Met Asn Asn Leu Ser Pro Ala Trp Lys Ser Phe Lys Val Ser Val Asn 1 5 10 15 Ser Leu Cys Ser Gly Asp Pro Asp Arg Arg Leu Lys Cys Ile Val Trp 20 25 30 Asp Trp Asp Ser Asn Gly Lys His Asp Phe Ile Gly Glu Phe Thr Ser 35 40 45 Thr Phe Lys Glu Met Arg Gly Ala Met Glu Gly Lys Gln Val Gln Trp

	50					55					60				
Glu	Cys	Ile	Asn	Pro	Lys	Tyr	Lys	Ala	Lys	Lys	Lys	Asn	Tyr	Lys	Asn
65					70					75					80
Ser	Gly	Thr	Val	Ile	Leu	Asn	Leu	Cys	Lys	Ile	His	Lys	Met	His	Ser
				85					90					95	
Phe	Leu	Asp	Tyr	Ile	Met	Gly	Gly	Cys	Gln	Ile	Gln	Phe	Thr	Val	Ala
			100					105					110		
Ile	Asp	Phe	Thr	Ala	Ser	Asn	Gly	Asp	Pro	Arg	Asn	Ser	Cys	Ser	Leu
		115					120					125			
His	Tyr	Ile	His	Pro	Tyr	Gln	Pro	Asn	Glu	Tyr	Leu	Lys	Ala	Leu	Val
	130					135					140				
Ala	Val	Gly	Glu	Ile	Cys	Gln	Asp	Tyr	Asp	Ser	Asp	Lys	Met	Phe	Pro
145					150					155					160
Ala	Phe	Gly	Phe	Gly	Ala	Arg	Ile	Pro	Pro	Glu	Tyr	Thr	Val	Ser	His
				165					170					175	
Asp	Phe	Ala	Ile	Asn	Phe	Asn	Glu	Asp	Asn	Pro	Glu	Cys	Ala	Gly	Ile
			180					185					190		
Gln	Gly	Val	Val	Glu	Ala	Tyr	Gln	Ser	Cys	Leu	Pro	Lys	Leu	Gln	Leu
		195					200					205			
Tyr	Gly	Pro	Thr	Asn	Ile	Ala	Pro	Ile	Ile	Gln	Lys	Val	Ala	Lys	Ser
	210					215					220				
Ala	Ser	Glu	Glu	Thr	Asn	Thr	Lys	Glu	Ala	Ser	Gln	Tyr	Phe	Ile	Leu
225					230					235					240
Leu	Ile	Leu	Thr	Asp	Gly	Val	Ile	Thr	Asp	Met	Ala	Asp	Thr	Arg	Glu
				245					250					255	
Ala	Ile	Val	His	Ala	Ser	His	Leu	Pro	Met	Ser	Val	Ile	Ile	Val	Gly
			260					265					270		
Val	Gly	Asn	Ala	Asp	Phe	Ser	Asp	Met	Gln	Met	Leu	Asp	Gly	Asp	Asp
		275					280					285			

Gly Ile Leu Arg Ser Pro Lys Gly Glu Pro Val Leu Arg Asp Ile Val Gln Phe Val Pro Phe Arg Asn Phe Lys His Ala Ser Pro Ala Ala Leu Ala Lys Ser Val Leu Ala Glu Val Pro Asn Gln Val Val Asp Tyr Tyr Asn Gly Lys Gly Ile Lys Pro Lys Cys Ser Ser Glu Met Tyr Glu Ser Ser Arg Thr Leu Ala Pro <210> 3340 <211> 108 <212> PRT

<400> 3340

<213> Homo sapiens

Met Tyr Phe Pro Ser Asp Val Thr Ser Leu Ile Gln Pro Cys Asp Gln Gly Ile Phe Arg Ser Met Asn Arg Lys Tyr Lys Ser Thr Phe Leu Asn Ser Met Leu Ala Ala Val Asn Arg Gly Met Gly Ala Gly Asn Phe Gln Lys Glu Phe Ser Ile Lys Asn Ala Ile Tyr Val Val Ala Asn Thr Trp Asn Thr Val Thr Lys Thr Gln Leu Cys Met Ser Gly Thr Thr Ser Gly

Leu Gln Leu Cys Leu Val Ile Met Met Asn Cys Val Cys Val Thr Leu

85 90 95

Lys Asp Ser Val Cys Gln Val Lys Lys Asn Asp Val
100 105

<210> 3341

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3341

Met Val Gly Leu Arg Trp Trp Asn His Ile Asp Glu Asp Gly Lys Ser

1 5 10 15

His Trp Val Phe Glu Ser Arg Lys Glu Ser Ser Gln Glu Asn Lys Thr

20 25 30

Val Ser Glu Ala Glu Ser Arg Ile Phe Trp Leu Gly Leu Ile Ala Cys

35 40 45

Pro Val Leu Trp Val Ile Phe Ala Phe Ser Ala Leu Phe Ser Phe Arg

50 55 60

Val Lys Trp Leu Ala Val Val Ile Met Gly Val Val Leu Gln Gly Ala

65 70 75 80

Asn Leu Tyr Gly Tyr Ile Arg Cys Lys Val Arg Ser Arg Lys His Leu

85 90 95

Thr Ser Met Ala Thr Ser Tyr Phe Gly Lys Gln Phe Leu Arg Gln Asn

100 105 110

Thr Gly Asp Asp Gln Thr Ser

<210> 3342

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3342

Met Glu Thr Cys Phe Arg Leu Arg Tyr Pro Ser Cys His Val Ala Leu

1 5 10 15

Thr Glu Cys Val Cys Arg Leu Glu Asn Ala Leu Arg Asn Phe Ala Cys

20 25 30

Leu Thr Thr Gly Asp Val Ile Ala Ile Asn Tyr Asn Glu Lys Ile Tyr

35 40 45

Glu Leu Arg Val Met Glu Thr Lys Pro Asp Lys Ala Val Ser Ile Ile 50 55 60

Glu Cys Asp Met Asn Val Asp Phe Asp Ala Pro Leu Gly Tyr Lys Glu
65 70 75 80

Pro Glu Arg Gln Val Gln His Glu Glu Ser Thr Glu Gly Glu Ala Asp 85 90 95

His Ser Gly Tyr Ala Gly Glu Leu Gly Phe Arg Ala Phe Ser Gly Ser 100 105 110

Gly Asn Arg Leu Asp Gly Lys Lys Lys Gly Val Glu Pro Ser Pro Ser 115 120 125

Pro Ile Lys Pro Gly Asp Ile Lys Arg Gly Ile Pro Asn Tyr Glu Phe 130 135 140

Lys Leu Gly Ser Ser

145

<210> 3343

<211> 806

<212> PRT

<213> Homo sapiens

<400> 3343

Met His Gly Lys Ser Thr Ala Val Leu Glu Met Asp Tyr Ser Ile Val

1 5 10 15

Asp Phe Leu Thr Leu Cys Glu Thr Pro Tyr Pro Asn Asp Phe Gln Glu
20 25 30

Pro Tyr Ala Val Val Leu Leu Glu Lys Asp Leu Val Leu Ile Asp
35 40 45

Leu Ala Gln Asn Gly Tyr Pro Ile Phe Glu Asn Pro Tyr Pro Leu Ser
50 55 60

Ile His Glu Ser Pro Val Thr Cys Cys Glu Tyr Phe Ala Asp Cys Pro
65 70 75 80

Val Asp Leu Ile Pro Ala Leu Tyr Ser Val Gly Ala Arg Gln Lys Arg

85 90 95

Gln Gly Tyr Ser Lys Lys Glu Trp Pro Ile Asn Gly Gly Asn Trp Gly
100 105 110

Leu Gly Ala Gln Ser Tyr Pro Glu Ile Ile Ile Thr Gly His Ala Asp 115 120 125

Gly Ser Val Lys Phe Trp Asp Ala Ser Ala Ile Thr Leu Gln Val Leu 130 135 140

Tyr Lys Leu Lys Thr Ser Lys Val Phe Glu Lys Ser Arg Asn Lys Asp 145 150 155 160

Asp Arg Pro Asn Thr Asp Ile Val Asp Glu Asp Pro Tyr Ala Ile Gln
165 170 175

Ile Ile Ser Trp Cys Pro Glu Ser Arg Met Leu Cys Ile Ala Gly Val 180 185 190

Ser	Ala	His	Val	Ile	Ile	Tyr	Arg	Phe	Ser	Lys	Gln	Glu	Val	Ile	Thr
		195					200					205			
Glu	Val	Île	Pro	Met	Leu	Glu	Val	Arg	Leu	Leu	Tyr	Glu	Ile	Asn	Asp
	210					215					220				
Val	Glu	Thr	Pro	Glu	Gly	Glu	Gln	Pro	Pro	Pro	Leu	Pro	Thr	Pro	Val
225					230					235					240
Gly	Gly	Ser	Asn	Pro	Gln	Pro	Ile	Pro	Pro	Gln	Ser	His	Pro	Ser	Thr
				245					250					255	
Ser	Ser	Ser	Ser	Ser	Asp	Gly	Leu	Arg	Asp	Asn	Val	Pro	Cys	Leu	Lys
			260					265					270		
Val	Lys	Asn	Ser	Pro	Leu	Lys	Gln	Ser	Pro	Gly	Tyr	Gln	Thr	Glu	Leu
		275					280					285			
Val	Ile	Gln	Leu	Val	Trp	Val	Gly	Gly	Glu	Pro	Pro	Gln	Gln	Ile	Thr
	290					295					300				
Ser	Leu	Ala	Val	Asn	Ser	Ser	Tyr	Gly	Leu	Val	Val	Phe	Gly	Asn	Cys
305					310					315					320
Asn	Gly	Ile	Ala	Met	Val	Asp	Tyr	Leu	Gln	Lys	Ala	Val	Leu	Leu	Asn
				325					330					335	
Leu	Gly	Thr	Ile	Glu	Leu	Tyr	Gly	Ser	Asn	Asp	Pro	Tyr	Arg	Arg	Glu
			340					345					350		
Pro	Arg	Ser	Pro	Arg	Lys	Ser	Arg	Gln	Pro	Ser	Gly	Ala	Gly	Leu	Cys
		355					360					365			
Asp	Ile	Ser	Glu	Gly	Thr	Val	Val	Pro	Glu	Asp	Arg	Cys	Lys	Ser	Pro
	370					375					380				
Thr	Ser	Gly	Ser	Ser	Ser	Pro	His	Asn	Ser	Asp	Asp	Glu	Gln	Lys	Met
385					390					395					400
Asn	Asn	Phe	Ile	Glu	Lys	Ala	Lys	Met	Ser	Arg	Lys	Leu	Ser	Leu	Pro
				405					410					415	
Thr	Asn	Len	I 175	Pro	·Asn	Leu	Asn	Val	Lvs	Asn	Asn	Ser	Phe	Ser	Arc

			420					425					430		
Ser	Arg	Ser	Ser	Ser	Val	Thr	Ser	Ile	Asp	Lys	Glu	Pro	Arg	Glu	Ala
		435					440					445			
Ile	Ser	Ala	Leu	His	Phe	Cys	Glu	Thr	Phe	Thr	Arg	Lys	Thr	Asp	Ser
	450					455					460				
Ser	Pro	Ser	Pro	Cys	Leu	Trp	Val	Gly	Thr	Thr	Leu	Gly	Thr	Val	Leu
465					470					475					480
Val	Ile	Ala	Leu	Asn	Leu	Pro	Pro	Gly	Gly	Glu	Gln	Arg	Leu	Leu	Gln
				485					490					495	
Pro	Val	Ile	Val	Ser	Pro	Ser	Gly	Thr	Ile	Leu	Arg	Leu	Lys	Gly	Ala
			500					505					510		
Ile	Leu	Arg	Met	Ala	Phe	Leu	Asp	Thr	Thr	Gly	Cys	Leu	Ile	Pro	Pro
		515					520					525			
Ala	Tyr	Glu	Pro	Trp	Arg	Glu	His	Asn	Val	Pro	Glu	Glu	Lys	Asp	Glu
	530					535					540				
Lys	Glu	Lys	Leu	Lys	Lys	Arg	Arg	Pro	Val	Ser	Val	Ser	Pro	Ser	Ser
545					550					555					560
Ser	Gln	Glu	Ile	Ser	Glu	Asn	Gln	Tyr	Ala	Val	Ile	Cys	Ser	Glu	Lys
				565					570					575	
Gln	Ala	Lys	Val	Ile	Ser	Leu	Pro	Thr	Gln	Asn	Cys	Ala	Tyr	Lys	Gln
			580					585					590		
Asn	Ile	Thr	Glu	Thr	Ser	Phe	Val	Leu	Arg	Gly	Asp	Ile	Val	Ala	Leu
		595					600					605			
Ser	Asn	Ser	Ile	Cys	Leu	Ala	Cys	Phe	Cys	Ala	Asn	Gly	His	Ile	Met
	610					615					620				
Thr	Phe	Ser	Leu	Pro	Ser	Leu	Arg	Pro	Leu	Leu	Asp	Val	Tyr	Tyr	Leu
625					630					635					640
Pro	Leu	Thr	Asn	Met	Arg	Ile	Ala	Arg	Thr	Phe	Cys	Phe	Thr	Asn	Asn
				645					650					655	

Tyr Ser Gln Glu Thr Cys Glu Asn Leu Gln Glu Met Leu Gly Glu Leu Phe Thr Pro Val Glu Thr Pro Glu Ala Pro Asn Arg Gly Phe Phe Lys Gly Leu Phe Gly Gly Gly Ala Gln Ser Leu Asp Arg Glu Glu Leu Phe Gly Glu Ser Ser Ser Gly Lys Ala Ser Arg Ser Leu Ala Gln His Ile Pro Gly Pro Gly Gly Ile Glu Gly Val Lys Gly Ala Ala Ser Gly Val

Gly Gln Ala Leu Tyr Leu Val Ser Pro Thr Glu Ile Gln Arg Leu Thr

Val Gly Glu Leu Ala Arg Ala Arg Leu Ala Leu Asp Glu Arg Gly Gln

Lys Leu Gly Asp Leu Glu Glu Arg Thr Ala Ala Met Leu Ser Ser Ala

Glu Ser Phe Ser Lys His Ala His Glu Ile Met Leu Lys Tyr Lys Asp

Lys Lys Trp Tyr Gln Phe

<210> 3344

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3344

Met Val Ala Gly His Gly Cys Val Thr Gly Glu Leu Val Arg Thr Gly

Gln Trp Thr Gly Ser Lys Ala Gly Pro Ala Arg Gly Thr Asp Arg Leu Gln Gly Asp Leu Pro Arg Asn Val His Arg Val Trp Asp Leu Ala Leu Ala Gly Leu Gly Pro Leu Cys Gly Cys Asn Ile Ile Lys Trp Arg Thr Ala Val Met Arg Leu Gly Asp Ala Ala Val Gly Gly Val Cys Pro Asp Pro Arg Ala Ala Arg Pro Ala Leu Val Thr Arg Ile Asn Gln Ala Arg Pro Leu Ile Cys Cys <210> 3345 <211> 600 <212> PRT <213> Homo sapiens <400> 3345 Met Ser His Gln Glu Gly Ser Thr Gly Gly Leu Pro Asp Leu Val Thr

Glu Ser Leu Phe Ser Ser Pro Glu Glu Gln Ser Gly Val Ala Ala Val Thr Ala Ala Ser Ser Asp Ile Glu Met Ala Ala Thr Glu Pro Ser Thr Gly Asp Gly Gly Asp Thr Arg Asp Gly Gly Phe Leu Asn Asp Ala Ser

Thr	Glu	Asn	Gln	Asn	Thr	Asp	Ser	Glu	Ser	Ser	Ser	Glu	Asp	Val	Glu
65					70					75					80
Leu	Glu	Ser	Met	Gly	Glu	Gly	Leu	Phe	Gly	Tyr	Pro	Leu	Val	Gly	Glu
				85					90					95	
Glu	Thr	Glu	Arg	Glu	Glu	Glu	Glu	Glu	Glu	Met	Glu	Glu	Glu	Gly	Glu
			100					105					110		
Glu	Glu	Glu	Gln	Pro	Arg	Met	Cys	Pro	Arg	Cys	Gly	Gly	Thr	Asn	His
		115					120					125			
Asp	Gln	Cys	Leu	Leu	Asp	Glu	Asp	Gln	Ala	Leu	Glu	Glu	Trp	Ile	Ser
	130					135					140				
Ser	Glu	Thr	Ser	Ala	Leu	Pro	Arg	Ser	Arg	Trp	Gln	Val	Leu	Thr	Ala
145					150					155					160
Leu	Arg	Gln	Arg	Gln	Leu	Gly	Ser	Ser	Ala	Arg	Phe	Val	Tyr	Glu	Ala
				165					170					175	
Cys	Gly	Ala	Arg	Thr	Phe	Val	Gln	Arg	Phe	Arg	Leu	Gln	Tyr	Leu	Leu
			180					185					190		
Gly	Ser	His	Ala	Gly	Ser	Val	Ser	Thr	Ile	His	Phe	Asn	Gln	Arg	Gly
		195					200					205			
Thr	Arg	Leu	Ala	Ser	Ser	Gly	Asp	Asp	Leu	Arg	Val	Ile	Val	Trp	Asp
	210					215					220				
Trp	Val	Arg	Gln	Lys	Pro	Val	Leu	Asn	Phe	Glu	Ser	Gly	His	Asp	Ιlε
225					230					235					240
Asn	Val	Ile	Gln	Ala	Lys	Phe	Phe	Pro	Asn	Cys	Gly	Asp	Ser	Thr	Leu
				245					250					255	
Ala	Met	Cys	Gly	His	Asp	Gly	Gln	Val	Arg	Val	Ala	Glu	Leu	Ile	Asn
			260					265					270		
Ala	Ser	Tyr	Cys	Glu	Asn	Thr	Lys	Arg	Val	Ala	Lys	His	Arg	Gly	Pro
		275					280					285			
Ala	His	Glu	Leu	Ala	Leu	Glu	Pro	Asp	Ser	Pro	Tyr	Lys	Phe	Leu	Thr

	290					295					300				
Ser	Gly	Glu	Asp	Ala	Val	Val	Phe	Thr	Ile	Asp	Leu	Arg	Gln	Asp	Arg
305					310					315					320
Pro	Ala	Ser	Lys	Val	Val	Val	Thr	Arg	Glu	Asn	Asp	Lys	Lys	Val	Gly
				325					330					335	
Leu	Tyr	Thr	Ile	Ser	Met	Asn	Pro	Ala	Asn	Ile	Tyr	Gln	Phe	Ala	Val
			340					345					350		
Gly	Gly	His	Asp	Gln	Phe	Val	Arg	Ile	Tyr	Asp	Gln	Arg	Arg	Ile	Asp
		355					360					365			
Lys	Lys	Glu	Asn	Asn	Gly	Val	Leu	Lys	Lys	Phe	Thr	Pro	His	His	Leu
	370					375					380				
Val	Tyr	Cys	Asp	Phe	Pro	Thr	Asn	Ile	Thr	Cys	Val	Val	Tyr	Ser	His
385					390					395					400
Asp	Gly	Thr	Glu	Leu	Leu	Ala	Ser	Tyr	Asn	Asp	Glu	Asp	Ile	Tyr	Leu
				405					410					415	
Phe	Asn	Ser	Ser	Leu	Ser	Asp	Gly	Ala	Gln	Tyr	Val	Lys	Arg	Tyr	Lys
			420					425					430		
Gly	His	Arg	Asn	Asn	Asp	Thr	Ile	Lys	Cys	Val	Asn	Phe	Tyr	Gly	Pro
		435					440					445			
Arg	Ser	Glu	Phe	Val	Val	Ser	Gly	Ser	Asp	Cys	Gly	His	Val	Phe	Phe
	450					455					460				
Trp	Glu	Lys	Ser	Ser	Ser	Gln	Ile	Ile	Gln	Phe	Met	Glu	Gly	Asp	Arg
465					470					475					480
Gly	Asp	Ile	Val	Asn	Cys	Leu	Glu	Pro	His	Pro	Tyr	Leu	Pro	Val	Leu
				485					490					495	
Ala	Thr	Ser	Gly	Leu	Asp	Gln	His	Val	Arg	Ile	Trp	Thr	Pro	Thr	Ala
			500					505					510		
Lys	Thr	Ala	Thr	Glu	Leu	Thr	Gly	Leu	Lys	Asp	Val		Lys	Lys	Asn
		515					520					525			

Lys Gln Glu Arg Asp Glu Asp Asn Leu Asn Tyr Thr Asp Ser Phe Asp 530 535 540 Asn Arg Met Leu Arg Phe Phe Val Arg His Leu Leu Gln Arg Ala His 560 545 550 555 Gln Pro Gly Trp Arg Asp His Gly Ala Glu Phe Pro Asp Glu Glu Glu 570 575 565 Leu Asp Glu Ser Ser Ser Thr Ser Asp Thr Ser Glu Glu Glu Gly Gln 580 585 590 Asp Arg Val Gln Cys Ile Pro Ser

600

<210> 3346

<211> 680

<212> PRT

<213> Homo sapiens

595

<400> 3346

Met Ser Cys Thr Gly Thr Pro Ser Cys Ile Tyr Leu Leu Ser Ala Leu

1 5 10 15

Ser Leu Arg Asp Leu Val Leu Asp Trp Glu Pro Arg Gly Val Pro Pro
20 25 30

Pro Leu Pro Gly Ala Ala Ala Thr Met Phe Ser Cys Val Lys Pro Tyr 35 40 45

Glu Asp Gln Asn Tyr Ser Ala Leu Arg Arg Asp Cys Arg Arg Arg Lys
50 55 60

Val Leu Phe Glu Asp Pro Leu Phe Pro Ala Thr Asp Asp Ser Leu Tyr
65 70 75 80

Tyr Lys Gly Thr Pro Gly Pro Ala Val Arg Trp Lys Arg Pro Lys Gly

				85					90					95	
Ile	Cys	Glu	Asp	Pro	Arg	Leu	Phe	Val	Asp	Gly	Ile	Ser	Ser	His	Asp
			100					105					110		
Leu	His	Gln	Gly	Gln	Val	Gly	Asn	Cys	Trp	Phe	Val	Ala	Ala	Cys	Ser
		115					120					125			
Ser	Leu	Ala	Ser	Arg	Glu	Ser	Leu	Trp	Gln	Lys	Val	Ile	Pro	Asp	Trp
	130					135					140				
Lys	Glu	Gln	Glu	Trp	Asp	Pro	Glu	Lys	Pro	Asn	Ala	Tyr	Ala	Gly	Ile
145					150					155					160
Phe	His	Phe	His	Phe	Trp	Arg	Phe	Gly	Glu	Trp	Val	Asp	Val	Val	Ile
				165					170					175	
Asp	Asp	Arg	Leu	Pro	Thr	Val	Asn	Asn	Gln	Leu	Ile	Tyr	Cys	His	Ser
			180					185					190		
Asn	Ser	Arg	Asn	Glu	Phe	Trp	Cys	Ala	Leu	Val	Glu	Lys	Ala	Tyr	Ala
		195					200					205			
Lys	Leu	Ala	Gly	Cys	Tyr	Gln	Ala	Leu	Asp	Gly	Gly	Asn	Thr	Ala	Asp
	210					215					220				
Ala	Leu	Val	Asp	Phe	Ala	Gly	Gly	Val	Ser	Glu	Pro	Ile	Asp	Leu	Thr
225					230					235					240
Glu	Gly	Asp	Phe	Ala	Asn	Asp	Glu	Thr	Lys	Arg	Asn	Gln	Leu	Phe	Glu
				245					250					255	
Arg	Met	Leu	Lys	Val	His	Ser	Arg	Gly	Gly	Leu	Ile	Ser	Ala	Ser	Ile
			260					265					270		
Lys	Ala	Val	Thr	Ala	Ala	Asp	Met	Glu	Ala	Arg	Leu	Ala	Cys	Gly	Leu
		275					280					285			
Val	Lys	Gly	His	Ala	Tyr	Ala	Val	Thr	Asp	Val	Arg	Lys	Val	Arg	Leu
	290					295					300				
Gly	His	Gly	Leu	Leu	Ala	Phe	Phe	Lys	Ser	Glu	Lys	Met	Asp	Met	Ile
305					310					315					320

Arg	Leu	Arg	Asn	Pro	Trp	Gly	Glu	Arg	Glu	Trp	Asn	Gly	Pro	Trp	Ser
				325					330					335	
Asp	Thr	Ser	Glu	Glu	Trp	Gln	Lys	Val	Ser	Lys	Ser	Glu	Arg	Glu	Lys
			340					345					350		
Met	Gly	Val	Thr	Val	Gln	Asp	Asp	Gly	Glu	Phe	Trp	Met	Thr	Phe	Glu
		355					360					365			
Asp	Val	Cys	Arg	Tyr	Phe	Thr	Asp	Ile	Ile	Lys	Cys	Arg	Val	Ile	Asn
	370					375					380				
Thr	Ser	His	Leu	Ser	Ile	His	Lys	Thr	Trp	Glu	Glu	Ala	Arg	Leu	His
385					390					395					400
Gly	Ala	Trp	Thr	Leu	His	Glu	Asp	Pro	Arg	Gln	Asn	Arg	Gly	Gly	Gly
				405					410					415	
Cys	Ile	Asn	His	Lys	Asp	Thr	Phe	Phe	Gln	Asn	Pro	Gln	Tyr	Ile	Phe
			420					425					430		
Glu	Val	Lys	Lys	Pro	Glu	Asp	Glu	Val	Leu	Ile	Cys	Ile	Gln	Gln	Arg
		435					440					445			
Pro	Lys	Arg	Ser	Thr	Arg	Arg	Glu	Gly	Lys	Gly	Glu	Asn	Leu	Ala	Ile
	450					455					460				
Gly	Phe	Asp	Ile	Tyr	Lys	Val	Glu	Glu	Asn	Arg	Gln	Tyr	Arg	Met	His
465					470					475					480
Ser	Leu	Gln	His	Lys	Ala	Ala	Ser	Ser	Ile	Tyr	Ile	Asn	Ser	Arg	Ser
				485					490					495	
Val	Phe	Leu	Arg	Thr	Asp	Gln	Pro	Glu	Gly	Arg	Tyr	Val	Ile	Ile	Pro
			500					505					510		
Thr	Thr	Phe	Glu	Pro	Gly	His	Thr	Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe
		515					520					525			
Thr	Asp	Val	Pro	Ser	Asn	Cys	Arg	Glu	Leu	Arg	Leu	Asp	Glu	Pro	Pro
	530					535					540				
His	Thr	Cvs	Trp	Ser	Ser	Leu	Cvs	Glv	Tvr	Pro	Gln	Leu	Val	Thr	Gln

Val His Val Leu Gly Ala Ala Gly Leu Lys Asp Ser Pro Thr Gly Ala Asn Ser Tyr Val Ile Ile Lys Cys Glu Gly Asp Lys Val Arg Ser Ala Val Gln Lys Gly Thr Ser Thr Pro Glu Tyr Asn Val Lys Gly Ile Phe Tyr Arg Lys Lys Leu Ser Gln Pro Ile Thr Val Gln Val Trp Asn His Arg Val Leu Lys Asp Glu Phe Leu Gly Gln Val His Leu Lys Ala Asp Pro Asp Asn Leu Gln Ala Leu His Thr Leu His Leu Arg Asp Arg Asn Ser Arg Gln Pro Ser Asn Leu Pro Gly Thr Val Ala Val His Ile Leu Ser Ser Thr Ser Leu Met Ala Val

<210> 3347

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3347

Met Ser Val Gly Thr Ser Leu Glu Gln Ala Gln Met Ser Thr Leu Thr

1 5 10 15

Cys Pro Leu Phe Ile Pro Thr Val Gly Arg Lys Thr Ala Leu His Ser

20 25 30

Gly Glu Asp Phe Gln Thr Leu Leu Phe Glu Arg Val Phe Val Asn Leu 35 40 45 Asp Gly Cys Phe Asp Met Ala Thr Gly Gln Phe Ala Ala Pro Leu Arg 50 55 60 Gly Ile Tyr Phe Phe Ser Leu Asn Val His Ser Trp Asn Tyr Lys Glu 70 75 65 80 Thr Tyr Val His Ile Met His Asn Gln Lys Glu Ala Val Ile Leu Tyr 85 90 95 Ala Gln Pro Ser Glu Arg Ser Ile Met Gln Ser Gln Ser Val Met Leu 100 105 110 Asp Leu Ala Tyr Gly Asp Arg Val Trp Val Arg Leu Phe Lys Arg Gln 115 120 125 Arg Glu Asn Ala Ile Tyr Ser Asn Asp Phe Asp Thr Tyr Ile Thr Phe 130 135 140 Ser Gly His Leu Ile Lys Ala Glu Asp Asp 145 150

<210> 3348

<211> 1149

<212> PRT

<213> Homo sapiens

<400> 3348

Met Ser Gly Tyr Gln Arg Leu Met Lys Glu Val Thr Glu Asp Leu Lys

1 5 10 15

Ile Tyr Val Pro Asp Thr Ile Cys Asn Arg Val Ser Lys Met Lys Glu

20 25 30

Asn Val Lys Gln Asn Arg Lys Gln Arg Glu Ser Ile Asp Lys Ile Lys

		35					40					45			
Val	Lys	Val	Ala	Asn	Thr	Arg	Lys	Gln	Ala	Leu	Gln	Glu	Gln	Phe	Asp
	50					55					60				
Glu	Trp	Ile	Leu	Asp	Pro	Lys	Gly	Met	Ile	Pro	Lys	Ser	Val	Ile	Gln
65					70					75					80
Asn	Val	Leu	Gln	Glu	Phe	Phe	Gln	Asn	Pro	Asp	Phe	Lys	Leu	Gly	Ser
				85					90					95	
His	Cys	Lys	Gln	Leu	Asp	Ile	Thr	Asp	Ser	Thr	Glu	Pro	Arg	Leu	Asn
			100					105					110		
Lys	Met	Glu	Phe	Thr	Glu	Tyr	Ile	Ser	Ser	His	Ile	Lys	Asp	Leu	Lys
		115					120					125			
Ser	Glu	Met	Phe	Glu	Glu	Leu	Leu	Lys	His	Leu	Cys	His	Ser	Ala	Asp
	130					135					140				
Glu	Phe	Arg	Glu	Val	Ile	Lys	Ala	Asp	Met	Arg	Arg	Gln	Met	Phe	Ala
145					150					155					160
Glu	Leu	Phe	Leu	His	Cys	Asp	His	Gly	Lys	Val	Gly	Phe	Leu	Asp	Arg
				165					170					175	
Gln	Arg	Thr	Leu	Ala	Leu	Leu	Glu	Leu	Phe	Tyr	Asp	His	Ser	Ser	Gln
			180					185					190		
Met	Leu	Arg	Ser	Leu	Leu	Gln	Asn	Pro	Arg	Gln	Trp	Pro	Phe	Ile	Glu
		195					200					205			
Phe	Glu	Glu	Ile	Asn	Leu	Thr	Glu	Leu	Trp	Gly	Asp	Met	Asp	Asn	Gln
	210					215					220				
Lys	His	Ile	Tyr	Glu	Gly	Phe	Asp	Lys	Val	Leu	Leu	Glu	Met	Asn	Thr
225					230					235					240
Leu	Leu	Ser	Ala	Asn	His	Ala	Ser	Lys	Thr	Gln	Ser	Lys	Leu	Leu	Glu
				245					250					255	
Ser	Pro	Asp	Gln	Pro	Lys	Leu	Asn	Glu	Gln	Arg	Thr	Ser	Thr	Pro	Ser
			260					265					270		

Pro	Asn	Pro	Pro	Glu	Gln	Gln	Arg	Gly	Val	Thr	Ala	Glu	Gln	Gly	Pro
		275					280					285			
Gln	Arg	Ile	Ser	Ile	Glu	Glu	Gln	Gln	Gln	Gly	Lys	Lys	Pro	Thr	Ala
	290					295					300				
Glu	Gln	Glu	Leu	Tyr	Ile	Glu	Ser	Val	Ile	Glu	Pro	Gly	Thr	His	Thr
305					310					315					320
Glu	Ser	Thr	Leu	Glu	Gln	Gly	Ser	Ser	Arg	Arg	Leu	Leu	Thr	Glu	Gln
				325					330					335	
Glu	Thr	His	Arg	Glu	Ser	Thr	Thr	Glu	Gln	Gly	Gln	His	Lys	Gly	Ser
			340					345					350		
Ile	Glu	Gly	Gln	Gly	Pro	Arg	Arg	Val	Ser	Val	Ser	Glu	Gln	Gly	Ser
		355					360					365			
Ser	Arg	Glu	Ser	Val	Ala	Glu	Gln	Gly	Ser	Arg	Arg	Glu	Ser	Ile	Ala
	370					375					380				
Glu	Gln	Asp	Arg	His	Lys	Gly	Ser	Val	Ala	Glu	Gln	Gly	Ser	Arg	Arg
385					390					395					400
Met	Ser	Ala	Ala	Glu	Gln	Gly	Ser	Leu	Arg	Glu	Ser	Val	Ile	Glu	Glu
				405					410					415	
Pro	Tyr	Gln	Lys	Ser	Glu	Gln	Gly	Pro	Tyr	Gly	Glu	Ile	Ile	Ser	Glu
			420					425					430		
Glu	Gln	Glu	Asp	Ile	Gly	Ser	Thr	Ser	Gln	Ser	Arg	Lys	Asp	Ser	Ile
		435					440					445			
Leu	Lys	Ser	Thr	Lys	Tyr	Gly	Glu	Pro	Ile	Thr	Ser	Glu	Tyr	Ile	Glu
	450					455					460				
Val	Pro	Leu	Gln	Glu	Lys	Arg	Ser	Trp	Glu	Gln	Thr	Tyr	Glu	Glu	Glu
465					470					475					480
Ile	Phe	Leu	Ser	Ser	Glu	Leu	Gln	Glu	Glu	Val	Pro	Thr	Leu	Ser	Arg
				485					490					495	
Lvs	Asn	His	Phe	Pro	Glu	Thr	Thr	Lvs	Lvs	Glu	Val	Gln	Lvs	Asp	Lvs

			500					505					510		
Pro	Cys	Glu	Pro	Lys	Ser	Gln	Lys	Ile	Glu	Gly	Lys	Ser	Trp	Ser	Gly
		515					520					525			
Glu	Phe	Phe	Thr	Cys	Asn	Trp	Lys	Met	Lys	Tyr	Val	Thr	Phe	Glu	Asp
	530					535					540				
Glu	Glu	Gln	Ala	Asn	Leu	Ile	Tyr	Gly	Asn	Ser	Arg	Phe	Thr	Ala	Lys
545					550					555					560
Leu	His	Ile	Gln	Phe	Pro	Lys	Pro	His	Pro	Gly	His	Glu	Val	Arg	Leu
				565					570					575	
Ser	Ser	Lys	Gln	Phe	Gln	Asn	Tyr	Ile	Glu	Leu	Val	Val	Ser	Glu	Leu
			580					585					590		
Arg	Gly	Asn	Glu	Asp	Gln	Val	Leu	Glu	Ser	Val	Val	Glu	Phe	Leu	Ile
		595					600					605			
Asn	Ala	Leu	Glu	Arg	Ser	His	Ile	Glu	Ser	Leu	Arg	Asn	Ser	Ala	Arg
	610					615					620				
Arg	Lys	Trp	Leu	His	Gln	Ile	Gln	Cys	Ala	Ala	Glu	Thr	Ser	Gly	Val
625					630					635					640
Ser	Leu	Glu	Pro	Val	Tyr	Ser	Glu	Thr	Phe	Lys	Ala	Leu	Met	Gln	Asp
				645					650					655	
Ala	Glu	Ala	His	Gly	Asn	Lys	Lys	Ile	Ser	Ala	His	Ile	Ser	Leu	Leu
			660					665					670		
Glu	Glu	Asn	Leu	Leu	Leu	Pro	Glu	Lys	Gly	Asn	Val	Leu	Leu	Arg	Asn
		675					680					685			
Val	Ala	Cys	Thr	Leu	Asp	Asp	Ala	Gln	Phe	Val	Leu	Asn	Arg	Val	Leu
	690					695					700				
Tyr	Arg	Asp	Met	Lys	Gly	Ile	Ser	Phe	Thr	Val	Val	Asp	Glu	Gly	Lys
705					710					715					720
Pro	Ile	His	Val	Pro	Gln	Val	Gln	Tyr	His	Gly	Asn	Ile	Phe	Phe	Trp
				725					730					735	

Asn	Gln	Ser	Arg	Asn	Lys	His	Asp	Tyr	Asn	Gly	Ser	Phe	Leu	Ala	Leu
			740					745					750		
Pro	Leu	Gln	Asp	Ala	Tyr	Met	Arg	Ile	Phe	Gly	Val	Leu	Ala	Val	Asp
		755					760					765			
Thr	Leu	Arg	Asp	Pro	His	Glu	Ile	Asn	Ile	Phe	Leu	Pro	His	Glu	Ile
	770					775					780				
Arg	Phe	Tyr	Gln	Gly	Val	Ala	Asn	Val	Phe	Ser	Thr	Ala	Tyr	His	Tyr
785					790					795					800
Val	His	Ser	Arg	Glu	His	Ile	Leu	His	Ile	Val	Ile	Thr	Gly	Ile	Gly
				805					810					815	
Trp	Leu	Tyr	Asp	Val	Thr	Ser	Ser	Ile	Thr	Ser	Ile	Thr	Thr	Tyr	Phe
			820					825					830		
Val	Glu	Pro	Ser	Pro	Ala	Gln	Asp	Ser	Asp	Tyr	Val	Leu	Arg	Asn	Met
		835					840					845			
Met	Val	Thr	Gly	Gln	Leu	Gly	Leu	Thr	Glu	Ile	His	Lys	Asn	Pro	Pro
	850					855					860				
Thr	Ile	His	Arg	Lys	Ser	Cys	Ile	Phe	Arg	Asp	Phe	Leu	Phe	Lys	Cys
865					870					875					880
Thr	Asp	Ser	Ser	Glu	Val	Val	Leu	Ala	Ser	Ala	Cys	Gly	Glu	Thr	His
				885					890					895	
Ile	Val	Val	Pro	Leu	Arg	Glu	Arg	Thr	Gly	Glu	Ala	Leu	Gly	Val	Leu
			900					905					910		
Asp	Phe	Asn	Ile	Gly	Gln	Asn	Arg	Met	Leu	Leu	Cys	Gln	Glu	Tyr	Lys
		915					920					925			
Asp	Leu	Gln	Lys	Met	Met	Lys	Val	Val	Gln	Val	Ala	Cys	Tyr	Glu	Ile
	930					935					940				
Leu	Gly	Glu	Phe	Ser	Gly	Glu	Ile	Lys	Lys	Lys	Tyr	Ile	Leu	Glu	Ile
945					950					955					960
Glu	Asn	Val	Arg	Glu	Val	Gln	Arg	Ala	Glv	Ile	Leu	Phe	Phe	Arg	Ile

Met Leu Leu Glu Leu Gln Glu Ser Ile Gln Leu Leu Asn Ser Met Glu Phe Val Ser Leu Leu Tyr Asp His Thr Leu Val Thr Glu Pro Asn Ser Pro Gln Asp Ser Lys Ser Met Glu Leu Glu Ala Asn Val Lys Leu Val Arg Asp Ile Leu Lys Ala Val Ile Leu Phe Phe His Pro Glu Leu Glu Phe Ser Ser Asp Phe Gly Ser Trp Asp Lys Cys Lys Phe Tyr Val Asn Lys Tyr Leu Val Asn Asn Ile Cys Ala Phe Asp Pro Thr Ala Lys His Val Glu Val Asn Val Gln Leu Ile Asp Glu Tyr Ile Arg Asp His Ser Arg Thr Glu Val Trp Lys Phe Gly Asn Val Val Ile Glu His Leu Tyr His Trp Ile His Ile Cys Ser Ala Leu Met Lys Ile Thr Lys Gln Leu Asn Ser Gly Ile Thr Pro Pro Leu Pro Ser Lys Thr Asp Asn Tyr Met Tyr Ala Lys Met Pro Gly Glu Gly Leu Gln Glu Lys

<210> 3349

<211> 1198

<212> PRT

<213> Homo sapiens

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Val Gln Glu Glu Asp Asp Gln Lys Arg Leu Leu Val Thr Val Trp Asn

	210					215					220				
Arg	Ala	Ser	Gln	Ser	Arg	Gln	Ser	Gly	Leu	Ile	Gly	Cys	Met	Ser	Phe
225					230					235					240
Gly	Val	Lys	Ser	Leu	Leu	Thr	Pro	Asp	Lys	Glu	Ile	Ser	Gly	Trp	Tyr
				245					250					255	
Tyr	Leu	Leu	Gly	Glu	His	Leu	Gly	Arg	Thr	Lys	His	Leu	Lys	Val	Ala
			260					265					270		
Arg	Arg	Arg	Leu	Arg	Pro	Leu	Arg	Asp	Pro	Leu	Leu	Arg	Met	Pro	Gly
		275					280					285			
Gly	Gly	Asp	Thr	Glu	Asn	Gly	Lys	Lys	Leu	Lys	Ile	Thr	Ile	Pro	Arg
	290					295					300				
Gly	Lys	Asp	Gly	Phe	Gly	Phe	Thr	Ile	Cys	Cys	Asp	Ser	Pro	Val	Arg
305					310					315					320
Val	Gln	Ala	Val	Asp	Ser	Gly	Gly	Pro	Ala	Glu	Arg	Ala	Gly	Leu	Gln
				325					330					335	
Gln	Leu	Asp	Thr	Val	Leu	Gln	Leu	Asn	Glu	Arg	Pro	Val	Glu	His	Trp
			340					345					350		
Lys	Cys	Val	Glu	Leu	Ala	His	Glu	Ile	Arg	Ser	Cys	Pro	Ser	Glu	Ile
		355					360					365			
Ile	Leu	Leu	Val	Trp	Arg	Met	Val	Pro	Gln	Val	Lys	Pro	Gly	Pro	Asp
	370					375					380				
Gly	Gly	Val	Leu	Arg	Arg	Ala	Ser	Cys	Lys	Ser	Thr	His	Asp	Leu	Gln
385					390					395					400
Ser	Pro	Pro	Asn	Lys	Arg	Glu	Lys	Asn	Cys	Thr	His	Gly	Val	Gln	Ala
				405					410					415	
Arg	Pro	Glu	Gln	Arg	His	Ser	Cys	His	Leu	Val	Cys	Asp	Ser	Ser	Asp
			420					425					430		
Gly	Leu	Leu	Leu	Gly	Gly	Trp	Glu	Arg	Tyr	Thr	Glu	Val	Ala	Lys	Arg
		435					440					445			

Gly	Gly	Gln	His	Thr	Leu	Pro	Ala	Leu	Ser	Arg	Ala	Thr	Ala	Pro	Thr
	450					455					460				
Asp	Pro	Asn	Tyr	Ile	Ile	Leu	Ala	Pro	Leu	Asn	Pro	Gly	Ser	Gln	Leu
465					470					475					480
Leu	Arg	Pro	Val	Tyr	Gln	Glu	Asp	Thr	Ile	Pro	Glu	Glu	Ser	Gly	Ser
				485					490					495	
Pro	Ser	Lys	Gly	Lys	Ser	Tyr	Thr	Gly	Leu	Gly	Lys	Lys	Ser	Arg	Leu
			500					505					510		
Met	Lys	Thr	Val	Gln	Thr	Met	Lys	Gly	His	Gly	Asn	Tyr	Gln	Asn	Cys
		515					520					525			
Pro	Val	Val	Arg	Pro	His	Ala	Thr	His	Ser	Ser	Tyr	Gly	Thr	Tyr	Val
	530					535					540				
Thr	Leu	Ala	Pro	Lys	Val	Leu	Val	Phe	Pro	Val	Phe	Val	Gln	Pro	Leu
545					550					555					560
Asp	Leu	Cys	Asn	Pro	Ala	Arg	Thr	Leu	Leu	Leu	Ser	Glu	Glu	Leu	Leu
				565					570					575	
Leu	Tyr	Glu	Gly	Arg	Asn	Lys	Ala	Ala	Glu	Val	Thr	Leu	Phe	Ala	Tyr
			580					585					590		
Ser	Asp	Leu	Leu	Leu	Phe	Thr	Lys	Glu	Asp	Glu	Pro	Gly	Arg	Cys	Asp
		595					600					605			
Val	Leu	Arg	Asn	Pro	Leu	Tyr	Leu	Gln	Ser	Val	Lys	Leu	Gln	Glu	Gly
	610					615					620				
Ser	Ser	Glu	Asp	Leu	Lys	Phe	Cys	Val	Leu	Tyr	Leu	Ala	Glu	Lys	Ala
625					630					635					640
Glu	Cys	Leu	Phe	Thr	Leu	Glu	Ala	His	Ser	Gln	Glu	Gln	Lys	Lys	Arg
				645					650					655	
Val	Cys	Trp	Cys	Leu	Ser	Glu	Asn	Ile	Ala	Lys	Gln	Gln	Gln	Leu	Ala
			660					665					670		
A12	Sar	Pro	Pro	Aen	Ser	Ive	Met	Phe	Glu	Thr	Glu	Ala	Asp	Glu	Lvs

		675					680					685			
Arg	Glu	Met	Ala	Leu	Glu	Glu	Gly	Lys	Gly	Pro	Gly	Ala	Glu	Asp	Ser
	690					695					700				
Pro	Pro	Ser	Lys	Glu	Pro	Ser	Pro	Gly	Gln	Glu	Leu	Pro	Pro	Gly	Gln
705					710					715					720
Asp	Leu	Pro	Pro	Asn	Lys	Asp	Ser	Pro	Ser	Gly	Gln	Glu	Pro	Ala	Pro
				725					730					735	
Ser	Gln	Glu	Pro	Leu	Ser	Ser	Lys	Asp	Ser	Ala	Thr	Ser	Glu	Gly	Ser
			740					745					750		
Pro	Pro	Gly	Pro	Asp	Ala	Pro	Pro	Ser	Lys	Asp	Val	Pro	Pro	Cys	Gln
		755					760					765			
Glu	Pro	Pro	Pro	Ala	Gln	Asp	Leu	Ser	Pro	Cys	Gln	Asp	Leu	Pro	Ala
	770					775					780				
Gly	Gln	Glu	Pro	Leu	Pro	His	Gln	Asp	Pro	Leu	Leu	Thr	Lys	Asp	Leu
785					790					795					800
Pro	Ala	Ile	Gln	Glu	Ser	Pro	Thr	Arg	Asp	Leu	Pro	Pro	Cys	Gln	Asp
				805					810					815	
Leu	Pro	Pro	Ser	Gln	Val	Ser	Leu	Pro	Ala	Lys	Ala	Leu	Thr	Glu	Asp
			820					825					830		
Thr	Met	Ser	Ser	Gly	Asp	Leu	Leu	Ala	Ala	Thr	Gly	Asp	Pro	Pro	Ala
		835					840					845			
Ala	Pro	Arg	Pro	Ala	Phe	Val	Ile	Pro	Glu	Val	Arg	Leu	Asp	Ser	Thr
	850					855					860				
Tyr	Ser	Gln	Lys	Ala	Gly	Ala	Glu	Gln	Gly	Cys	Ser	Gly	Asp	Glu	Glu
865					870					875					880
Asp	Ala	Glu	Glu	Ala	Glu	Glu	Val	Glu	Glu	Gly	Glu	Glu	Gly	Glu	Glu
				885					890					895	
Asp	Glu	Asp	Glu	Asp	Thr	Ser	Asp	Asp	Asn	Tyr	Gly	Glu	Arg	Ser	Glu
			900					905					910		

	Ala	Lys		Ser	Ser	Met	Ile		Thr	Gly	Gln	Gly		Glu	Gly	Gly
	_	_	915		 .			920	-				925		•	0.1
	Leu	Ser	Leu	Arg	Val	Gln	Asn	Ser	Leu	Arg	Arg		Thr	His	Ser	Glu
		930					935					940				
	Gly	Ser	Leu	Leu	Gln	Glu	Pro	Arg	Gly	Pro	Cys	Phe	Ala	Ser	Asp	Thr
	945					950					955					960
	Thr	Leu	His	Cys	Ser	Asp	Gly	Glu	Gly	Ala	Ala	Ser	Thr	Trp	Gly	Met
					965					970					975	
	Pro	Ser	Pro	Ser	Thr	Leu	Lys	Lys	Glu	Leu	Gly	Arg	Asn	Gly	Gly	Ser
				980					985					990		
	Met	His	His	Leu	Ser	Leu	Phe	Phe	Thr	Gly	His	Arg	Lys	Met	Ser	Gly
			995					1000					1005			
	Ala	Asp	Thr	Val	Gly	Asp	Asp	Asp	Glu	Ala	Ser	Arg	Lys	Arg	Lys	Ser
	1	010]	1015				-	1020				
	Lys	Asn	Leu	Ala	Lys	Asp	Met	Lys	Asn	Lys	Leu	Gly	Ile	Phe	Arg	Arg
•	1025	5				1030					1035					1040
	Arg	Asn	Glu	Ser	Pro	Gly	Ala	Pro	Pro	Ala	Gly	Lys	Ala	Asp	Lys	Met
					1045					1050				-	1055	
	Met	Lys	Ser	Phe	Lys	Pro	Thr	Ser	Glu	Glu	Ala	Leu	Lys	Trp	Gly	Glu
				1060					1065					1070		
	Ser	Leu	Glu	Lys	Leu	Leu	Val	His	Lys	Tyr	Gly	Leu	Ala	Val	Phe	Gln
		-	1075				,	1080					1085			
	Ala	Phe	Leu	Arg	Thr	Glu	Phe	Ser	Glu	Glu	Asn	Leu	Glu	Phe	Trp	Leu
	1	090				•	1095					1100				
	Ala	Cys	Glu	Asp	Phe	Lys	Lys	Val	Lys	Ser	Gln	Ser	Lys	Met	Ala	Ser
	1105	5				1110					1115					1120
	Lys	Ala	Lys	Lys	Ile	Phe	Ala	Glu	Tyr	Ile	Ala	Ile	Gln	Ala	Cys	Lys
					1125					1130					1135	
	Glu	Val	Asn	Leu	Asp	Ser	Tvr	Thr	Arg	Glu	His	Thr	Lvs	Asp	Asn	Leu

Gln Ser Val Thr Arg Gly Cys Phe Asp Leu Ala Gln Lys Arg Ile Phe Gly Leu Met Glu Lys Asp Ser Tyr Pro Arg Phe Leu Arg Ser Asp Leu Tyr Leu Asp Leu Ile Asn Gln Lys Lys Met Ser Pro Pro Leu <210> 3350 <211> 222 <212> PRT <213> Homo sapiens <400> 3350 Met Asp Pro Pro Trp Ser Tyr Pro Asp Pro Gly Ser Gly Pro Thr Ser Ala Leu Ala Ile Pro Leu Pro Trp Pro Gly Pro Arg Tyr Trp Ser Leu Ser Cys Pro Ser Arg Gly Pro Gly Pro Ala Leu Pro Val Pro Cys Ser Ile Leu Gly Trp Pro Cys His Gly Leu Val Leu Pro Leu Ala Cys Pro Ser Leu Pro Cys Leu Cys Pro Arg Ser Ala Pro Ala Phe Ala Pro Val Leu Val Pro Ala Leu Thr Gln Pro Trp Thr Phe Pro Asp Leu Ala Ser Ala Leu Ala Leu Pro Trp Pro Trp Leu Gly Ile Cys Pro Thr Leu Ser

Met Ala Trp Leu Trp Ser Cys Pro Ala Leu Leu Leu Phe Cys Pro Gly 115 120 125 Thr Ala Leu Ala Leu Pro Tyr His Trp Leu Trp Ser Cys Pro Tyr Ala 130 135 140 Gly Leu Thr Val Pro Leu Pro Trp Leu Trp Pro Gly Pro Trp Pro Tyr 160 150 155 145 Ser Asp Pro Ala Met Thr Leu Ser Trp Pro Trp Pro Gly Thr Trp Pro 165 170 175 Cys Gln Gly Leu Ala Leu Ala Leu Ser Trp Pro Arg Pro Phe Pro Gly 180 185 190 Phe Gly Cys Val Leu Ser Leu Ile Cys Pro Gly Pro Ser Leu Ala Leu 200 205 195 Pro Tyr Pro Phe Ser Gly Val Gly Pro Gly Ser Gly Pro Gly 220 210 215

<210> 3351

<211> 467

<212> PRT

<213> Homo sapiens

<400> 3351

Met Leu Val His Leu Phe Arg Val Gly Ile Arg Gly Gly Pro Phe Pro

1 5 10 15

Gly Arg Leu Leu Pro Pro Leu Arg Phe Gln Thr Phe Ser Ala Val Arg

20 25 30

Arg Phe Leu Arg Leu Gln Pro Arg Val Ser Gln Lys Glu Gly Thr Leu

35 40 45

Gly Val Ser Asp His Ala Gln Ser Ala Leu Pro Thr Gly Gly Pro Leu

	50					55					60				
Ser	Trp	Pro	Trp	Arg	Tyr	Ser	Asp	Gly	Tyr	Arg	Ser	Ser	Ser	Leu	Leu
65					70					75					80
Arg	Ala	Val	Ala	His	Leu	Arg	Ser	Gl'n	Leu	Trp	Ala	His	Leu	Pro	Arg
				85	•				90					95	
Ala	Pro	Leu	Ala	Pro	Arg	Trp	Ser	Pro	Ser	Ala	Trp	Cys	Trp	Val	Gly
			100					105					110		
Gly	Ala	Leu	Leu	Gly	Pro	Met	Val	Leu	Ser	Lys	His	Pro	His	Leu	Cys
		115					120					125			
Leu	Val	Ala	Leu	Cys	Glu	Ala	Glu	Glu	Ala	Pro	Pro	Ala	Ser	Ser	Thr
	130					135					140				
Pro	His	Val	Val	Gly	Ser	Arg	Phe	Asn	Trp	Lys	Leu	Phe	Trp	Gln	Phe
145					150					155					160
Leu	His	Pro	His	Leu	Leu	Val	Leu	Gly	Val	Ala	Val	Val	Leu	Ala	Leu
				165					170					175	
Gly	Ala	Ala	Leu	Val	Asn	Val	Gln	Ile	Pro	Leu	Leu	Leu	Gly	Gln	Leu
			180					185					190		
Val	Glu	Val	Val	Ala	Lys	Tyr	Thr	Arg	Asp	His	Val	Gly	Ser	Phe	Met
		195					200					205			
Thr	Glu	Ser	Gln	Asn	Leu	Ser	Thr	His	Leu	Leu	Ile	Leu	Tyr	Gly	Val
	210					215					220				
Gln	Gly	Leu	Leu	Thr	Phe	Gly	Tyr	Leu	Val	Leu	Leu	Ser	His	Val	Gly
225					230					235					240
Glu	Arg	Met	Ala	Val	Asp	Met	Arg	Arg	Ala	Leu	Phe	Ser	Ser	Leu	Leu
				245					250					255	
Arg	Gln	Asp	Ile	Thr	Phe	Phe	Asp	Ala	Asn	Lys	Thr	Gly	Gln	Leu	Val
			260					265					270		
Ser	Arg	Leu	Thr	Thr	Asp	Val	Gln	Glu	Phe	Lys	Ser	Ser	Phe	Lys	Leu
		275					280					285			

Val	Ile	Ser	Gln	Gly	Leu	Arg	Ser	Cys	Thr	Gln	Val	Ala	Gly	Cys	Leu
	290					295					300				
Val	Ser	Leu	Ser	Met	Leu	Ser	Thr	Arg	Leu	Thr	Leu	Leu	Leu	Met	Val
305					310					315					320
Ala	Thr	Pro	Ala	Leu	Met	Gly	Val	Gly	Thr	Leu	Met	Gly	Ser	Gly	Leu
				325					330					335	
Arg	Lys	Leu	Ser	Arg	Gln	Cys	Gln	Glu	Gln	Ile	Ala	Arg	Ala	Met	Gly
			340					345					350		
Val	Ala	Asp	Glu	Ala	Leu	Gly	Asn	Val	Arg	Thr	Val	Arg	Ala	Phe	Ala
		355					360					365			
Met	Glu	Gln	Arg	Glu	Glu	Glu	Arg	Tyr	Gly	Ala	Glu	Leu	Glu	Ala	Cys
	370					375					380				
Arg	Cys	Arg	Ala	Glu	Glu	Leu	Gly	Arg	Gly	Ile	Ala	Leu	Phe	Gln	Gly
385					390					395					400
Leu	Ser	Asn	Ile	Ala	Phe	Asn	Cys	Met	Val	Leu	Gly	Thr	Leu	Phe	Ile
				405					410					415	
Gly	Gly	Ser	Leu	Val	Ala	Gly	Gln	Gln	Leu	Thr	Gly	Gly	Asp	Leu	Met
			420					425					430		
Ser	Phe	Leu	Val	Ala	Ser	Gln	Thr	Val	Gln	Arg	Gln	Val	His	Gly	Gln
		435					440					445			
Pro	Leu	Cys	Pro	Val	Trp	Ala	Gly	Gly	Pro	Gly	Ala	Glu	Cys	Arg	Cys
	450					455					460				
Pro	Gly	Leu													

<210> 3352

<211> 291

<212> PRT

<213> Homo sapiens

<400> 3352

Met Gln Ala Lys Asn Lys Asp Ala Leu Gln Pro Ile Lys Glu Asp Arg

1 5 10 15

Thr Gly Lys Ala Gln Asp Asp Ala Phe Trp Leu Gln Ser Leu Ile Thr
20 25 30

Asp Ala Phe His Asp Lys Gly Phe Gln Lys Ile Lys Glu Tyr Phe Gln
35 40 45

Gln Lys Glu Ser His Phe Pro Gln Lys Tyr Asn Arg Leu Leu Leu Tyr
50 55 60

Arg Leu Asp Arg Ser Ile Asn Lys Glu Leu Asp Lys Asn Glu Phe Gln
65 70 75 80

Ser Val Ser Leu Leu Lys Cys Ile Gln Arg Phe Leu Val Asp Gly
85 90 95

Leu Lys Glu Asp Glu Pro Leu Leu Ile Arg Gln Gly Leu Ile Pro Lys
100 105 110

Leu Val Ser Trp Phe Glu Arg Thr Thr Gly Ile Leu Thr Ser Glu Gly
115 120 125

Leu Ala Ser Asp Thr Ser Leu Ile Cys Val Ile Glu Asp Phe Phe Asp 130 135 140

Thr Ala Leu Ile Ile Ser Arg Ser Ser Ser Glu Gly Lys Ile Gln Met 145 150 155 160

Leu Asp Ser Phe Leu Leu Ser Leu Gly Phe Leu Val Thr Glu Lys Thr
165 170 175

Val Asn His Leu Leu Gln Gln Glu Gly Leu Lys Thr Phe Asn Cys Ile 180 185 190

Leu His Ala Val Pro Arg Glu Glu Arg Lys Lys Phe Pro Leu Ser Glu
195 200 205

Gly Met Cys His Leu Met Lys Asp Leu Ala Arg Thr Leu Leu Thr Val Gly Asp Tyr Asp Gln Gln Val Ala Ile Ser Glu Ala Leu Cys Arg Leu Thr Ile Lys Lys Ser Arg Asp Glu Leu Val His Lys Trp Phe Asp Asp Glu Val Ile Ala Glu Ala Phe Lys Glu Ile Lys Asp Arg Glu Phe Glu Thr Asp Ser Arg Arg Phe Leu Asn His Leu Asn Asn Arg Leu Gly Asp Gln Arg Arg

<210> 3353

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3353

Met Ala Ser Gly Tyr Ala Ala His Glu Gly His Gly Thr Tyr Ala Ser Glu Thr Ser Gly Asn Gly Gly Arg Trp Glu Pro Leu Pro Thr Phe Ala Ala Arg Ala Val Ser Ser Gln Ser Leu His Gln Pro Gly His Arg Gly Leu Gln Trp Asp Gly Pro Gly Phe Ser Ala Gly Trp His Arg Ser Gln Pro Met Gly Ser Gly Gly Glu Cys Cys Val Thr Trp Leu Gln His Tyr

65 70 75 80

Pro Thr Leu Trp Asn Ser Ser Val Gly Gly Gly Phe His Cys Arg
85 90 95

Lys Gln Thr His Gln Val Cys Pro Gly Val Asn Tyr Leu Arg
100 105 110

<210> 3354

<211> 945

<212> PRT

<213> Homo sapiens

<400> 3354

Met Gly Ala Arg Ser Gly Ala Arg Gly Ala Leu Leu Leu Leu Leu Leu

1 5 10 15

Leu Cys Trp Asp Pro Arg Leu Ser Gln Ala Gly Thr Asp Ser Gly Ser

20 25 30

Glu Val Leu Pro Asp Ser Phe Pro Ser Ala Pro Ala Glu Pro Leu Pro

35 40 45

Tyr Phe Leu Gln Glu Pro Gln Asp Ala Tyr Ile Val Lys Asn Lys Pro

50 55 60

Val Glu Leu Arg Cys Arg Ala Phe Pro Ala Thr Gln Ile Tyr Phe Lys

65 70 75 80

Cys Asn Gly Glu Trp Val Ser Gln Asn Asp His Val Thr Gln Glu Gly

85 90 95

Leu Asp Glu Ala Thr Gly Leu Arg Val Arg Glu Val Gln Ile Glu Val

100 105 110

Ser Arg Gln Gln Val Glu Glu Leu Phe Gly Leu Glu Asp Tyr Trp Cys

115 120 125

Gln	Cys	Val	Ala	Trp	Ser	Ser	Ala	Gly	Thr	Thr	Lys	Ser	Arg	Arg	Ala
	130					135					140				
Tyr	Val	Arg	Ile	Ala	Tyr	Leu	Arg	Lys	Asn	Phe	Asp	Gln	Glu	Pro	Leu
145					150					155					160
Gly	Lys	Glu	Val	Pro	Leu	Asp	His	Glu	Val	Leu	Leu	Gln	Cys	Arg	Pro
				165					170					175	
Pro	Glu	Gly	Val	Pro	Val	Ala	Glu	Val	Glu	Trp	Leu	Lys	Asn	Glu	Asp
			180					185					190		
Val	Ile	Asp	Pro	Thr	Gln	Asp	Thr	Asn	Phe	Leu	Leu	Thr	Ile	Asp	His
		195					200					205			
Asn	Leu	Ile	Ile	Arg	Gln	Ala	Arg	Leu	Ser	Asp	Thr	Ala	Asn	Tyr	Thr
	210					215					220				
Cys	Val	Ala	Lys	Asn	Ile	Val	Ala	Lys	Arg	Arg	Ser	Thr	Thr	Ala	Thr
225					230					235					240
Val	Ile	Val	Tyr	Val	Asn	Gly	Gly	Trp	Ser	Ser	Trp	Ala	Glu	Trp	Ser
				245					250					255	
Pro	Cys	Ser	Asn	Arg	Cys	Gly	Arg	Gly	Trp	Gln	Lys	Arg	Thr	Arg	Thr
			260					265					270		
Cys	Thr	Asn	Pro	Ala	Pro	Leu	Asn	Gly	Gly	Ala	Phe	Cys	Glu	Gly	Gln
		275					280					285			
Ala	Phe	Gln	Lys	Thr	Ala	Cys	Thr	Thr	Ile	Cys	Pro	Val	Asp	Gly	Ala
	290					295					300				
Trp	Thr	Glu	Trp	Ser	Lys	Trp	Ser	Ala	Cys	Ser	Thr	Glu	Cys	Ala	His
305					310					315					320
Trp	Arg	Ser	Arg	Glu	Cys	Met	Ala	Pro	Pro	Pro	Gln	Asn	Gly	Gly	Arg
				325					330					335	
Asp	Cys	Ser	Gly	Thr	Leu	Leu	Asp	Ser	Lys	Asn	Cys	Thr	Asp	Gly	Leu
			340					345					350		
Cys	Met	Gln	Asn	Lys	Lys	Thr	Leu	Ser	Asp	Pro	Asn	Ser	His	Leu	Leu

		355					360					365			
Glu	Ala	Ser	Gly	Asp	Ala	Ala	Leu	Tyr	Ala	Gly	Leu	Val	Val	Ala	Ile
	370					375					380				
Phe	Val	Val	Val	Ala	Ile	Leu	Met	Ala	Val	Gly	Val	Val	Val	Tyr	Arg
385					390					395					400
Arg	Asn	Cys	Arg	Asp	Phe	Asp	Thr	Asp	Ile	Thr	Asp	Ser	Ser	Ala	Ala
				405					410					415	
Leu	Thr	Gly	Gly	Phe	His	Pro	Val	Asn	Phe	Lys	Thr	Ala	Arg	Pro	Ser
			420					425					430		
Asn	Pro	Gln	Leu	Leu	His	Pro	Ser	Val	Pro	Pro	Asp	Leu	Thr	Ala	Ser
		435					440					445			
Ala	Gly	Ile	Tyr	Arg	Gly	Pro	Val	Tyr	Ala	Leu	Gln	Asp	Ser	Thr	Asp
	450					455					460				
Lys	Ile	Pro	Met	Thr	Asn	Ser	Pro	Leu	Leu	Asp	Pro	Leu	Pro	Ser	Leu
465					470					475					480
Lys	Val	Lys	Val	Tyr	Ser	Ser	Ser	Thr	Thr	Gly	Ser	Gly	Pro	Gly	Leu
				485					490					495	
Ala	Asp	Gly	Ala	Asp	Leu	Leu	Gly	Val	Leu	Pro	Pro	Gly	Thr	Tyr	Pro
			500					505					510		
Ser	Asp	Phe	Ala	Arg	Asp	Thr	His	Phe	Leu	His	Leu	Arg	Ser	Ala	Ser
		515					520					525			
Leu	Gly	Ser	Gln	Gln	Leu	Leu	Gly	Leu	Pro	Arg	Asp	Pro	Gly	Ser	Ser
	530					535					540				
Val	Ser	Gly	Thr	Phe	Gly	Cys	Leu	Gly	Gly	Arg	Leu	Ser	Ile	Pro	Gly
545					550					555					560
Thr	Gly	Val	Ser	Leu	Leu	Val	Pro	Asn	Gly	Ala	Ile	Pro	Gln		Lys
				565					570					575	
Phe	Tyr	Glu	Met	Tyr	Leu	Leu	Ile		Lys	Ala	Glu	Ser		Leu	Pro
			580					585					590		

Leu	Ser	Glu	Gly	Thr	GIn	Thr	Val	Leu	Ser	Pro	Ser	Val	Thr	Cys	Gly
		595					600					605			
Pro	Thr	Gly	Leu	Leu	Leu	Cys	Arg	Pro	Val	Ile	Leu	Thr	Met	Pro	His
	610					615					620				
Cys	Ala	Glu	Val	Ser	Ala	Arg	Asp	Trp	Ile	Phe	Gln	Leu	Lys	Thr	Gln
625					630					635					640
Ala	His	Gln	Gly	His	Trp	Glu	Glu	Val	Val	Thr	Leu	Asp	Glu	Glu	Thr
				645					650					655	
Leu	Asn	Thr	Pro	Cys	Tyr	Cys	Gln	Leu	Glu	Pro	Arg	Ala	Cys	His	Ile
			660					665					670		
Leu	Leu	Asp	Gln	Leu	Gly	Thr	Tyr	Val	Phe	Thr	Gly	Glu	Ser	Tyr	Ser
		675					680					685			
Arg	Ser	Ala	Val	Lys	Arg	Leu	Gln	Leu	Ala	Val	Phe	Ala	Pro	Ala	Leu
	690					695					700				
Cys	Thr	Ser	Leu	Glu	Tyr	Ser	Leu	Arg	Val	Tyr	Cys	Leu	Glu	Asp	Thr
705					710					715					720
Pro	Val	Ala	Leu	Lys	Glu	Val	Leu	Glu	Leu	Glu	Arg	Thr	Leu	Gly	Gly
				725					730					735	
Tyr	Leu	Val	Glu	Glu	Pro	Lys	Pro	Leu	Met	Phe	Lys	Asp	Ser	Tyr	His
			740					745					750		
Asn	Leu	Arg	Leu	Ser	Leu	His	Asp	Leu	Pro	His	Ala	His	Trp	Arg	Ser
		755					760					765			
Lys	Leu	Leu	Ala	Lys	Tyr	Gln	Glu	Ile	Pro	Phe	Tyr	His	Ile	Trp	Ser
	770					775					780				
Gly	Ser	Gln	Lys	Ala	Leu	His	Cys	Thr	Phe	Thr	Leu	Glu	Arg	His	Ser
785					790					795					800
Leu	Ala	Ser	Thr	Glu	Leu	Thr	Cys	Lys	Ile	Cys	Val	Arg	Gln	Val	Glu
				805					810					815	
Gly	Glu	Gly	Gln	Ile	Phe	Gln	Leu	His	Thr	Thr	Leu	Ala	Glu	Thr	Pro

820 825 830 Ala Gly Ser Leu Asp Thr Leu Cys Ser Ala Pro Gly Ser Thr Val Thr 840 835 845 Thr Gln Leu Gly Pro Tyr Ala Phe Lys Ile Pro Leu Ser Ile Arg Gln 850 855 860 Lys Ile Cys Asn Ser Leu Asp Ala Pro Asn Ser Arg Gly Asn Asp Trp 870 880 865 875 Arg Met Leu Ala Gln Lys Leu Ser Met Asp Arg Tyr Leu Asn Tyr Phe 885 890 895 Ala Thr Lys Ala Ser Pro Thr Gly Val Ile Leu Asp Leu Trp Glu Ala 900 905 910 Leu Gln Gln Asp Asp Gly Asp Leu Asn Ser Leu Ala Ser Ala Leu Glu 915 920 925 Glu Met Gly Lys Ser Glu Met Leu Val Ala Val Ala Thr Asp Gly Asp 930 935 940 Cys 945

<210> 3355

<211> 962

<212> PRT

<213> Homo sapiens

<400> 3355

Met Asp Thr Arg Pro Lys Val Ser Ser Leu Leu Asn Arg Met Ala Asn

1 5 10 15

Tyr Thr Asn Leu Thr Gln Gly Ala Lys Glu His Glu Glu Ala Glu Asn

20 25 30

Ile	Thr	Glu	Gly	Lys	Lys	Lys	Pro	Thr	Lys	Thr	Met	Leu	Thr	Ala	Ile
		35					40					45			
Ser	Met	Ser	Ala	Ile	Ala	Thr	Asn	Gly	Val	Val	Pro	Ala	Gly	Gly	Ser
	50					55					60				
Tyr	Phe	Met	Ile	Ser	Arg	Ala	Leu	Gly	Pro	Glu	Phe	Gly	Gly	Ala	Val
65					70					75					80
Gly	Leu	Cys	Phe	Tyr	Leu	Gly	Thr	Thr	Phe	Ala	Ala	Ala	Met	Tyr	Ile
				85					90					95	
Leu	Gly	Ala	Ile	Glu	Ile	Phe	Leu	Val	Tyr	Ile	Val	Pro	Arg	Ala	Ala
			100					105					110		
Ile	Phe	His	Ser	Asp	Asp	Ala	Leu	Lys	Glu	Ser	Ala	Ala	Met	Leu	Asn
		115					120					125			
Asn	Met	Arg	Val	Tyr	Gly	Thr	Ala	Phe	Leu	Val	Leu	Met	Val	Leu	Val
	130					135					140				
Val	Phe	Ile	Gly	Val	Arg	Tyr	Val	Asn	Lys	Phe	Ala	Ser	Leu	Phe	Leu
145					150					155					160
Ala	Cys	Val	Ile	Val	Ser	Ile	Leu	Ala	Ile	Tyr	Ala	Gly	Ala	Ile	Lys
				165					170					175	
Ser	Ser	Phe	Ala	Pro	Pro	His	Phe	Pro	Val	Cys	Met	Leu	Gly	Asn	Arg
			180					185					190		
Thr	Leu	Ser	Ser	Arg	His	Ile	Asp	Val	Cys	Ser	Lys	Thr	Lys	Glu	Ile
		195					200					205			
Asn	Asn	Met	Thr	Val	Pro	Ser	Lys	Leu	Trp	Gly	Phe	Phe	Cys	Asn	Ser
	210					215					220				
Ser	Gln	Phe	Phe	Asn	Ala	Thr	Cys	Asp	Glu	Tyr	Phe	Val	His	Asn	Asn
225					230					235					240
Val	Thr	Ser	Ile	Gln	Gly	Ile	Pro	Gly	Leu	Ala	Ser	Gly	Ile	Ile	Thr
				245					250					255	
Glu	Asn	Leu	Trp	Ser	Asn	Tyr	Leu	Pro	Lys	Gly	Glu	Ile	Ile	Glu	Lys

			260					265					270		
Pro	Ser	Ala	Lys	Ser	Ser	Asp	Val	Leu	Gly	Ser	Leu	Asn	His	Glu	Tyr
		275					280					285			
Val	Leu	Val	Asp	Ile	Thr	Thr	Ser	Phe	Thr	Leu	Leu	Val	Gly	Ile	Phe
	290					295					300				
Phe	Pro	Ser	Val	Thr	Gly	Ile	Met	Ala	Gly	Ser	Asn	Arg	Ser	Gly	Asp
305					310					315					320
Leu	Lys	Asp	Ala	Gln	Lys	Ser	Ile	Pro	Ile	Gly	Thr	Ile	Leu	Ala	Ile
				325					330					335	
Leu	Thr	Thr	Ser	Phe	Val	Tyr	Leu	Ser	Asn	Val	Val	Leu	Phe	Gly	Ala
			340					345					350		
Cys	Ile	Glu	Gly	Val	Val	Leu	Arg	Asp	Lys	Phe	Gly	Asp	Ala	Val	Lys
		355					360					365			
Gly	Asn	Leu	Val	Val	Gly	Thr	Leu	Ser	Trp	Pro	Ser	Pro	Trp	Val	Ile
	370					375					380				
Val	Ile	Gly	Ser	Phe	Phe	Ser	Thr	Cys	Gly	Ala	Gly	Leu	Gln	Ser	Leu
385					390					395					400
Thr	Gly	Ala	Pro	Arg	Leu	Leu	Gln	Ala	Ile	Ala	Lys	Asp	Asn	Ile	Ile
				405					410					415	
Pro	Phe	Leu	Arg	Val	Phe	Gly	His	Ser	Lys	Ala	Asn	Gly	Glu	Pro	Thr
			420					425					430		
Trp	Ala	Leu	Leu	Leu	Thr	Ala	Ala	Ile	Ala	Glu	Leu	Gly	Ile	Leu	Ile
		435					440					445			
Ala	Ser	Leu	Asp	Leu	Val	Ala	Pro	Ile	Leu	Ser	Met	Phe	Phe	Leu	Met
	450					455					460				
Cys	Tyr	Leu	Phe	Val	Asn	Leu	Ala	Cys	Ala	Leu	Gln	Thr	Leu	Leu	Arg
465					470					475					480
Thr	Pro	Asn	Trp	Arg	Pro	Arg	Phe	Arg	Tyr	Tyr	His	Trp	Ala	Leu	Ser
				485					490					495	

Phe	Met	Gly	Met	Ser	He	Cys	Leu	Ala	Leu	Met	Pne	He	Ser	Ser	Irp
			500					505					510		
Tyr	Tyr	Ala	Ile	Val	Ala	Met	Val	Ile	Ala	Gly	Met	Ile	Tyr	Lys	Tyr
		515					520					525			
Ile	Glu	Tyr	Gln	Gly	Ala	Glu	Lys	Glu	Trp	Gly	Asp	Gly	Ile	Arg	Gly
	530					535					540				
Leu	Ser	Leu	Ser	Ala	Ala	Arg	Phe	Ala	Leu	Leu	Arg	Leu	Glu	Glu	Gly
545					550					555					560
Pro	Pro	His	Thr	Lys	Asn	Trp	Arg	Pro	Gln	Leu	Leu	Val	Leu	Leu	Lys
				565					570					575	
Leu	Asp	Glu	Asp	Leu	His	Val	Lys	His	Pro	Arg	Leu	Leu	Thr	Phe	Ala
			580					585					590		
Ser	Gln	Leu	Lys	Ala	Gly	Lys	Gly	Leu	Thr	Ile	Val	Gly	Ser	Val	Ιle
		595					600					605			
Val	Gly	Asn	Phe	Leu	Glu	Asn	Tyr	Gly	Glu	Ala	Leu	Ala	Ala	Glu	Glr
	610					615					620				
Thr	Ile	Lys	His	Leu	Met	Glu	Ala	Glu	Lys	Val	Lys	Gly	Phe	Cys	Glr
625					630					635					640
Leu	Val	Val	Ala	Ala	Lys	Leu	Arg	Glu	Gly	Ile	Ser	His	Leu	Ile	Glr
				645					650					655	
Ser	Cys	Gly	Leu	Gly	Gly	Met	Lys	His	Asn	Thr	Val	Val	Met	Gly	Trp
			660					665					670		
Pro	Asn	Gly	Trp	Arg	Gln	Ser	Glu	Asp	Ala	Arg	Ala	Trp	Lys	Thr	Phe
		675					680					685			
Ile	Gly	Thr	Val	Arg	Val	Thr	Thr	Ala	Ala	His	Leu	Ala	Leu	Leu	Val
	690					695					700				
Ala	Lys	Asn	Ile	Ser	Phe	Phe	Pro	Ser	Asn	Val	Glu	Gln	Phe	Ser	Glı
705					710					715					720
Gly	Asn	Ile	Asp	Val	Trp	Trp	Ile	Val	His	Asp	Gly	Gly	Met	Leu	Met

				725					730					735	
Leu	Leu	Pro	Phe	Leu	Leu	Lys	Gln	His	Lys	Val	Trp	Arg	Lys	Cys	Ser
			740					745					750		
Ile	Arg	Ile	Phe	Thr	Val	Ala	Gln	Leu	Glu	Asp	Asn	Ser	Ile	Gln	Met
		755					760					765			
Lys	Lys	Asp	Leu	Ala	Thr	Phe	Leu	Tyr	His	Leu	Arg	Ile	Glu	Ala	Glu
	770					775					780				
Val	Glu	Val	Val	Glu	Met	His	Asp	Ser	Asp	Ile	Ser	Ala	Tyr	Thr	Tyr
785					790					795					800
Glu	Arg	Thr	Leu	Met	Met	Glu	Gln	Arg	Ser	Gln	Met	Leu	Arg	His	Met
				805					810					815	
Arg	Leu	Ser	Lys	Thr	Glu	Arg	Asp	Arg	Glu	Ala	Gln	Leu	Val	Lys	Asp
			820					825					830		
Arg	Asn	Ser	Met	Leu	Arg	Leu	Thr	Ser	Ile	Gly	Ser	Asp	Glu	Asp	Glu
		835					840					845			
Glu	Thr	Glu	Thr	Tyr	Gln	Glu	Lys	Val	His	Met	Thr	Trp	Thr	Lys	Asp
	850					855					860				
Lys	Tyr	Met	Ala	Ser	Arg	Gly	Gln	Lys	Ala	Lys	Ser	Met	Glu	Gly	Phe
865					870					875					880
Gln	Asp	Leu	Leu	Asn	Met	Arg	Pro	Asp	Gln	Ser	Asn	Val	Arg	Arg	Met
				885					890					895	
His	Thr	Ala	Val	Lys	Leu	Asn	Glu	Val	Ile	Val	Asn	Lys	Ser	His	Glu
			900					905					910		
Ala	Lys	Leu	Val	Leu	Leu	Asn	Met	Pro	Gly	Pro	Pro	Arg	Asn	Pro	Glu
		915					920					925			
Gly	Asp	Glu	Asn	Tyr	Met	Glu	Phe	Leu	Glu	Val	Leu	Thr	Glu	Gly	Leu
	930					935					940				
Glu	Arg	Val	Leu	Leu	Val	Arg	Gly	Gly	Gly	Ser	Glu	Val	Ile	Thr	Ile
945					950					955					960

Tyr Ser

<210> 3356

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3356

Met Leu Lys His Asn Ala Thr Thr His Ser Cys Ser His Pro His Thr

1 5 10 15

Leu Thr Arg Thr Met Tyr Leu Ile Thr His Met Leu Ser His Thr Cys

20 25 30

Thr His Asn Ala Arg Ala His Arg Leu Thr Pro Thr Cys Ser His Thr

35 40 45

Cys Leu Cys Asn Ala Pro Thr Arg Gln Ile Ala Pro Thr Pro Thr His

50 55 60

Leu His Ile His Thr His Ile Cys Pro His Thr Leu Ser Leu Ser His

65 70 75 80

Thr Pro Thr Gln Cys Thr Ser Ser His Ser His Thr Cys Ser His Thr

85 90 95

His Ser Leu Thr Cys Pro His Thr Leu Ala Pro Thr Arg His Thr His

100 105 110

Ser His Ala Cys Thr His Pro His Val Gln Thr His Thr Ala Ser Ala

115 120 125

Tyr Thr Phe Thr Thr His Ser His Thr Pro Gly His Thr His Ser Cys

130 135 140

Ser His Leu Ile His Thr His Ser His Ala His Ser His Pro Pro Asn

145					150					155					160
Ala	Pro	Thr	His	Thr	His	Ala	His	Thr	Leu	Arg	Pro	Thr	Tyr	Cys	Pro
				165					170					175	
His	Thr	Arg	Ser	His	Pro	Met	His	Leu	Leu	Thr	Leu	Ile	Arg	Pro	Leu
			180					185					190		
Thr	Pro	Ala	His	Thr	His	Leu	Thr	Pro	Gly	Ser	His	Thr	His	Val	His
		195					200					205			
Thr	Pro	Ala	His	Thr	Pro	His	Thr	Arg	Ser	His	Asn	His	Thr	Cys	Leu
	210					215					220				
Tyr	Leu	Leu	Thr	His	Ala	Cys	Thr	Asn	Thr	Pro	Ala	Tyr	Thr	Ser	Tyr
225					230					235					240
Thr	Ala	His	Pro	His	Thr	Leu	His	Cys	Ser	Pro	Ser	His	Thr	His	Ala
				245					250					255	
Pro	Ala	His	Thr	His	Met	Leu	Thr	Pro	His	His	Ser	Leu	Thr	His	Ile
			260					265					270		
His	Ser	His	Met	Ile	Ala	Pro	Thr	His	Thr	Ser	His	Thr	Leu	Ala	Arg
		275					280			•		285			
Thr	His	Leu	Leu	Thr	His	Ile	Ser	Arg	Tyr	Ser	Ala	Pro	His	Ala	His
	290					295					300				
Thr	Cys	Ser	His	Thr	Ser	His	Ile	Thr	Gln	Leu	His	Thr	Arg	Pro	Cys
305					310					315					320
Ser	His	Thr	Cys	Ala	His	Thr	Pro	His	Thr	Ile	His	Ser	Arg	Thr	His
				325					330					335	
Pro	Leu	Thr	His	Ala	His	Val	Cys	Ser	His	Thr	Cys	Ser	Pro	Ile	His
			340					345					350		
Thr	His	Thr	Ser	Ser	His	Thr	Ser	His	Gln	Val	Ser	His	Thr	Leu	Met
		355					360					365			
Leu	Thr	Asn	Ser	Cys	Ser	His	Thr	Cys							
	370					375									

<210> 3357 <211> 147 <212> PRT <213> Homo sapiens <400> 3357 Met Leu Pro Glu Ala Glu Gly Ile Gly Ser Gln Cys Leu Thr His Thr Met Arg Phe Gly Arg Gln Gly Ser Asn Met Gln Arg Trp Gln Leu Cys Ser Gln Pro Thr Glu Leu Arg Gly Thr Ser Leu Gln Ser Trp Gln Thr Leu Ala Gln Asp Thr Thr Gly Phe Phe Leu Leu Leu Met Asn Phe His Glu Ala Val Gly Glu Leu Phe Ser Arg Ser Val Gly Glu Leu Thr Ile Gln Lys Val Ile Ser Tyr Tyr Ser Asp Pro Cys Val Tyr Pro Arg Glu Asp Leu Leu Ile Ile Asn Lys Val His Trp Thr Cys Tyr Ser Val Leu Cys Ala Cys Cys Leu Glu Val Leu Met Phe Ser His Val Gly Met Gly Phe Gly His Pro Val Ile Trp Gln Thr Ile Ser Ala Ser Thr Lys Arg

Pro Val Arg

出証特2004-3059661

<210> 3358 <211> 174 <212> PRT <213> Homo sapiens <400> 3358 Met Gly Leu Ala Gly Phe Thr Lys Gln Glu Arg Arg Arg His Arg Leu Asp Lys Gly Arg Trp Thr Gly Gln Pro Ala Val Gln Gln Pro His Arg Thr Gln Leu Pro Asp Arg Glu His Gln Leu Thr Leu Ile Pro Pro Ala Pro Gly Asn Ala Thr Ala Glu Glu Ser Leu Gln Asp Gly Pro Asp Thr Leu Leu Gln His Gly Cys Trp Glu Pro Ala Gln Ala Arg His Phe Ser Thr Gly Ala Ile Glu Asn Ser Leu Arg Gln Lys Gly Leu Cys Gln Pro Thr Glu Val Thr Ser Pro Ser Ala Asp Gln Ala Ser Gly Pro Val Ala Leu Gln Asn Ser Lys Ser His Leu Cys Arg Ser Gln Pro Ile Leu Leu Pro Pro Val Phe Ile Ser Cys Pro Glu Gln Val Gln Asn Arg Gly Pro Ser Met Gly Glu Lys Ser Leu Cys Leu Gln Ala Val Phe Phe Thr Val

Thr Ser His Tyr Phe Cys Ala Arg Ser His Phe Ser Gly Ser

<210> 3359

<211> 635

<212> PRT

<213> Homo sapiens

<400> 3359

Met Asp Met Trp Ser Val Asn Pro Ser Asn Lys Pro Ser Leu Pro Ser

1 5 10 15

Val Phe Ser Leu Pro Val Ser Val Phe Arg Arg Tyr His Leu Pro Val
20 25 30

His Val Ile Gly His His Ala Val Ser Pro Tyr Ser Ile Val Leu Pro
35 40 45

Leu Ser Ala Asp Cys Leu Ala Leu Lys Pro Val Ser Asp Met Leu Arg 50 55 60

Ile Ala Trp Asn Leu Ser Trp Tyr His Gly Ser Asp Asn Leu Leu Lys
65 70 75 80

Glin Met Asn Ser Glu Thr Lys Thr Glin Glu Ile Leu Asp Ala Leu Lys

85 90 95

Leu Ser Thr Glu Asp Ile Leu Thr Leu Lys Ile Thr His Met Ala Ser
100 105 110

Gly Leu Gln Asp Cys Leu His Ser Ile Val Gln Ala Ala Thr His Arg 115 120 125

Glu Val Arg Ala Ala Val Thr Arg Met Ser Phe Tyr Leu Leu Asn Asp 130 135 140

Arg Leu Ser Leu Lys Gly Cys Pro Gly Pro Cys Gly Val Thr Leu Lys
145 150 155 160

Ser Leu Ala Trp His Thr Ala Leu Asn Arg Phe Leu Gln Val Leu Pro

				165					170					175	
Ala	Cys	Thr	Glu	Asp	Glu	Lys	Leu	Leu	Ile	Asp	Ile	Ile	His	Phe	Leu
			180					185					190		
Asn	Lys	Leu	Ile	Lys	Glu	Gln	Arg	Lys	Asn	Ser	Ser	Leu	Glu	Leu	Leu
		195					200					205			
Asn	Trp	Ile	Leu	Glu	Leu	Leu	Leu	Arg	His	Ser	Ala	Asn	Pro	Leu	Leu
	210					215					220				
Asp	Leu	Leu	Val	Leu	Thr	Glu	Ser	Gln	Ala	Arg	Glu	Glu	Thr	Asp	Asp
225					230					235					240
Ile	Arg	Thr	Ala	Val	Arg	Gln	Gln	Leu	Gln	Lys	Glu	Leu	Ile	Ala	Leu
				245					250					255	
Phe	Asp	Thr	Leu	Leu	Leu	Asn	Phe	Met	Glu	Val	Thr	Asp	Arg	Lys	Cys
			260					265					270		
Ser	Glu	Leu	Leu	Tyr	Val	Phe	Gln	Thr	Gln	Leu	Ala	Leu	Lys	Leu	Leu
		275					280					285			
Gln	Cys	Leu	Lys	Val	Thr	Asp	Ala	Pro	His	Phe	Tyr	Gly	Leu	Pro	Ser
	290					295					300				
Leu	Glu	Arg	Thr	Leu	Arg	Gly	Met	Ala	Asn	Leu	Thr	Ala	Phe	Pro	Gly
305					310					315					320
Trp	Ser	Ser	His	Ser	Pro	Leu	Thr	Lys	Pro	Leu	Asp	Ile	Cys	Val	Lys
				325					330					335	
Tyr	Leu	Ser	Gly	Leu	Leu	Glu	Val	Ile	Thr	Ser	Phe	Tyr	Val	Glu	Arg
			340					345					350		
Gly	Gly	Asn	Ala	Met	Ser	Phe	Met	Gly	Lys	Gly	Val	Thr	Lys	Ser	Thr
		355					360					365			
Ile	Leu	Cys	Leu	Leu	His	Leu	Ser	His	Glu	Met	Met	Ala	Gln	Ala	Gly
	370					375					380				
Ser	Leu	Glu	Trp	Met	Ser	Leu	Trp	Phe	Leu	Pro	Leu	Gly	Ser	His	Ser
385					390					395					400

Gly	Glu	His	Ile	Pro	Thr	Gln	Gln	Gly	Leu	Ala	Trp	Leu	He	Pro	Leu
				405					410					415	
Trp	Val	Asp	Arg	Asp	Pro	Glu	Val	Arg	Phe	Thr	Ser	Leu	Gly	Leu	Gly
			420					425					430		
Ser	Ala	Leu	Thr	Thr	Leu	Glu	Thr	Gly	Cys	Val	Ala	Leu	Ala	Asn	Ser
		435					440					445			
Cys	Gln	Asn	Ile	Ser	Gly	Gly	Leu	Trp	Gly	Thr	Val	Val	Asn	Ile	Leu
	450					455					460				
Leu	Asp	Gln	Ser	Glu	Cys	Ser	Met	Val	Arg	Arg	Glu	Ala	Ala	Phe	Ile
465					470					475					480
Leu	Gln	Asn	Leu	Leu	Val	Ile	Pro	Met	Pro	Thr	Glu	Ile	Ile	Lys	Asp
				485					490					495	
Tyr	Thr	Trp	Gln	Gly	Pro	Cys	Val	His	Asp	Glu	Asp	Ser	Gly	Leu	Ser
			500					505					510		
Leu	Ile	Gly	Lys	Pro	Ala	Leu	Gln	Ala	Leu	Leu	Tyr	His	Cys	His	Phe
		515					520					525			
Tyr	Glu	His	Leu	Asn	Gln	Met	Val	Lys	His	Cys	Tyr	Leu	Gly	Arg	Cys
	530					535					540				
Met	Phe	Asp	Leu	Asn	Phe	Ser	Ala	Phe	Asp	Arg	Asn	Ser	Glu	Ser	Asn
545					550					555					560
Asp	Leu	Asn	Gly	Leu	Asp	Asp	Ser	Phe	Lys	Phe	Trp	Arg	Ala	Pro	Ser
				565					570					575	
Arg	Thr	Ser	Gln	Asp	Arg	Asp	Pro	Ser	Ser	Leu	Ser	Thr	Ser	Glu	Thr
			580					585					590		
Thr	Val	Ala	Pro	Ser	Leu	Gly	Ser	Thr	Glu	Phe	Gln	Pro	Leu	Val	Gln
		595					600					605			
Ser	Thr	Thr	Leu	Leu	Pro	Glu	Ala	Ser	His	Asp	Gln	Phe	Val	Ala	Gln
	610					615					620				
Gly	Asn	Arg	His	Phe	Val	Thr	Asn	Ile	Gln	Phe					

625 630 635

<210> 3360

<211> 309

<212> PRT

<213> Homo sapiens

<400> 3360

Met Ala Val Asn Gln Ser His Thr Glu Asn Arg Arg Gly Ala Leu Ile

1 5 10 15

Pro Asn Gly Glu Ser Leu Leu Lys Arg Ser Pro Asn Val Glu Leu Ser

20 25 30

Phe Pro Gln Arg Ser Glu Gly Ser Asn Val Phe Ser Gly Arg Lys Thr

35 40 45

Gly Thr Leu Phe Leu Thr Ser Tyr Arg Val Ile Phe Ile Thr Ser Cys

50 55 60

Ser Ile Ser Asp Pro Met Leu Ser Phe Met Met Pro Phe Asp Leu Met

65 70 75 80

Thr Asn Leu Thr Val Glu Gln Pro Val Phe Ala Ala Asn Phe Ile Lys

85 90 95

Gly Thr Ile Gln Ala Ala Pro Tyr Gly Gly Trp Glu Gly Gln Ala Thr

100 105 110

Phe Lys Leu Val Phe Arg Asn Gly Asp Ala Ile Glu Phe Ala Gln Leu

115 120 125

Met Val Lys Ala Ala Ser Ala Ala Ala Arg Gly Phe Pro Leu Arg Thr

130 135 140

Leu Asn Asp Trp Phe Ser Ser Met Gly Ile Tyr Val Ile Thr Gly Glu

145 150 155 160

Gly Asn Met Cys Thr Pro Gln Met Pro Cys Ser Val Ile Val Tyr Gly
165 170 175

Ala Pro Pro Ala Gly Tyr Gly Ala Pro Pro Pro Gly Tyr Gly Ala Pro
180 185 190

Pro Ala Gly Tyr Gly Ala Gln Pro Val Gly Asn Glu Gly Pro Pro Val
195 200 205

Gly Tyr Arg Ala Ser Pro Val Arg Tyr Gly Ala Pro Pro Leu Gly Tyr 210 215 220

Gly Ala Pro Pro Ala Gly Tyr Gly Ala Pro Pro Leu Gly Tyr Gly Ala 225 230 235 240

Pro Pro Leu Gly Tyr Gly Thr Pro Pro Leu Gly Tyr Gly Ala Pro Pro 245 250 255

Leu Gly Tyr Gly Ala Pro Pro Ala Gly Asn Glu Gly Pro Pro Ala Gly
260 265 270

Tyr Arg Ala Ser Pro Ala Gly Ser Gly Ala Arg Pro Gln Glu Ser Thr 275 280 285

Ala Ala Gln Ala Pro Glu Asn Glu Ala Ser Leu Pro Ser Ala Ser Ser 290 295 300

Ser Gln Val His Ser

305

<210> 3361

<211> 524

<212> PRT

<213> Homo sapiens

<400> 3361

Met Glu Arg Ala Gly Trp Ser Ala Asn Leu Ala Trp Leu Ser Gly Gly

1				5					10					15	
Ile	Thr	Leu	Cys	Ser	Gly	Glu	Arg	Glu	Ala	Arg	Asp	Arg	Gly	Leu	Gly
			20					25					30		
Arg	Ser	Val	Asn	Gln	Pro	Lys	Ala	Gly	Ala	Leu	Glu	Lys	Leu	Gln	Thr
		35					40					45			
Ser	Met	Lys	Asn	Met	Glu	Lys	Glu	Leu	Leu	Cys	Pro	Val	Cys	Gln	Glu
	50					55					60				
Met	Tyr	Lys	Gln	Pro	Leu	Val	Leu	Pro	Cys	Thr	His	Asn	Val	Cys	Gln
65					70					75					80
Ala	Cys	Ala	Arg	Glu	Val	Leu	Gly	Gln	Gln	Gly	Tyr	Ile	Gly	His	Gly
				85					90					95	
Gly	Asp	Pro	Ser	Ser	Glu	Pro	Thr	Ser	Pro	Ala	Ser	Thr	Pro	Ser	Thr
			100					105					110		
Arg	Ser	Pro	Arg	Leu	Ser	Arg	Arg	Thr	Leu	Pro	Lys	Pro	Asp	Arg	Leu
		115					120					125			
Asp	Arg	Leu	Leu	Lys	Ser	Gly	Phe	Gly	Thr	Tyr	Pro	Gly	Arg	Lys	Arg
	130					135					140				
Gly	Ala	Leu	His	Pro	Gln	Val	Ile	Met	Phe	Pro	Cys	Pro	Ala	Cys	Gln
145					150					155					160
Gly	Asp	Val	Glu	Leu	Gly	Glu	Arg	Gly	Leu	Ala	Gly	Leu	Phe	Arg	Asn
				165					170					175	
Leu	Thr	Leu	Glu	Arg	Val	Val	Glu	Arg	Tyr	Arg	Gln	Ser	Val	Ser	Val
			180					185					190		
Gly	Gly	Ala	Ile	Leu	Cys	Gln	Leu	Cys	Lys	Pro	Pro	Pro	Leu	Glu	Ala
		195					200					205			
Thr	Lys	Gly	Cys	Thr	Glu	Cys	Arg	Ala	Thr	Phe	Cys	Asn	Glu	Cys	Phe
	210					215					220				
Lys	Leu	Phe	His	Pro	Trp	Gly	Thr	Gln	Lys	Ala	Gln	His	Glu	Pro	Thr
225					230					235					240

Leu	Pro	Thr	Leu	Ser	Phe	Arg	Pro	Lys	Gly	Leu	Met	Cys	Pro	Asp	His
				245					250					255	
Lys	.Glu	Glu	Val	Thr	His	Tyr	Cys	Lys	Thr	Cys	Gln	Arg	Leu	Val	Cys
			260					265					270		
Gln	Leu	Cys	Arg	Val	Arg	Arg	Thr	His	Ser	Gly	His	Lys	Ile	Thr	Pro
		275					280					285			
Val	Leu	Ser	Ala	Tyr	Gln	Ala	Leu	Lys	Asp	Lys	Leu	Thr	Lys	Ser	Leu
	290					295					300				
Thr	Tyr	Ile	Leu	Gly	Asn	Gln	Asp	Thr	Val	Gln	Thr	Gln	Ile	Cys	Glu
305					310					315					320
Leu	Glu	Glu	Ala	Val	Arg	His	Thr	Glu	Val	Ser	Gly	Gln	Gln	Ala	Lys
				325					330					335	
Glu	Glu	Val	Ser	Gln	Leu	Val	Arg	Gly	Leu	Gly	Ala	Val	Leu	Glu	Glu
			340					345					350		
Lys	Arg	Ala	Ser	Leu	Leu	Gln	Ala	Ile	Glu	Glu	Cys	Gln	Gln	Glu	Arg
		355					360					365			
Leu	Ala	Arg	Leu	Ser	Ala	Gln	Ile	Gln	Glu	His	Arg	Ser	Leu	Leu	Asp
	370					375					380				
Gly	Ser	Gly	Leu	Val	Gly	Tyr	Ala	Gln	Glu	Val	Leu	Lys	Glu	Thr	Asp
385					390					395					400
Gln	Pro	Cys	Phe	Val	Gln	Ala	Ala	Lys	Gln	Leu	His	Asn	Arg	Ile	Ala
				405					410					415	
Arg	Ala	Thr	Glu	Ala	Leu	Gln	Thr	Phe	Arg	Pro	Ala	Ala	Ser	Ser	Ser
			420		-			425					430		
Phe	Arg	His	Cys	Gln	Leu	Asp	Val	Gly	Arg	Glu	Met	Lys	Leu	Leu	Thr
		435					440					445			
Glu	Leu	Asn	Phe	Leu	Arg	Gly	Cys	Gly	His	Arg	Gly	Leu	Cys	Ser	Gly
	450					455					460				
Ala	Pro	Gln	Cvs	Leu	Ara	Pro	Pro	Ser	Leu	Thr	Pro	Ser	Ala	Pro	Leu

<210> 3362

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3362

Met Thr Ser Leu Thr His Gly Met His Leu Thr Ser Ser Thr Ser Cys

1 5 10 15

Ser Cys Gln Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Arg Ser

20 25 30

Ser Gly Thr Ser Ser Thr Ser Arg Ser Trp Trp Ser Ser Gly Thr Ser 35 40 45

Ser Thr Ser Cys Ser Trp Trp Ser Ser Gly Thr Ser Ser Thr Phe Cys
50 55 60

Ser Cys Trp Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Trp Ser 65 70 75 80

Ser Gly Thr Ser Ser Thr Pro Cys Ser Cys Arg Ser Ser Gly Thr Ser 85 90 95

Ser Thr Ser Cys Ser Cys Trp Ser Ser Gly Thr Ser Ser Thr Ser Trp

100 105 110

Ser Cys Lys Ser Ser Gly Thr Ser Ser Thr Cys Tyr Met Cys Leu Ser Ser Gly Thr Ser Ser Thr Ser Tyr Ser Ser Trp Ser Ser Gln Thr Ser Ser Thr Ser Ser Met Cys Leu Pro Ser Arg Thr Ser Ser Ile Phe Tyr Ser Cys Leu Pro Leu Gly His His Leu Pro Phe Cys Ser Val Arg Pro Leu Gly Pro Pro Thr Thr Ser Pro Leu Ser Asn Leu Trp Ile Leu Ser His Pro Phe Tyr Leu Gly Gly Val Trp Pro Leu Asn Asn His Leu His Met Asn Leu Leu Gly Tyr Phe Asn Asn Leu His Leu Trp Ser Leu Gly Leu Gln Pro Leu Pro Pro Pro Gly Ser Pro Leu Val His Leu Pro Pro Pro Pro Leu Gly Trp Pro Leu Leu Ser Glu Leu Leu Gln Asp Leu Asn Gln Leu Pro Tyr Pro Leu Lèu Pro Val Gly Pro Arg Pro Arg Pro Pro His Val Leu Leu Gly Ile Phe Ile

<210> 3363

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3363 Met Thr Thr Gln Ser Val Ala Leu Val Ser Glu Leu Met Thr Gln Lys Leu His Val Leu Gln Gln Gly Gln Ala Ile Thr Thr Leu Cys Gly Leu Thr Ser Gly His Gly Pro Arg Lys Ala Gly Phe Gln Ala Ser Leu Leu Gln Pro Pro Ala Ser Pro Cys Pro Thr Pro Arg Ser Ser Phe Leu Leu Pro Glu Glu Gln Arg Gly Lys Asn Thr Arg Arg Lys Ser Ala Ser Pro Trp Pro Gln Arg Thr Ser Cys Leu Trp Ala Ala Ala Gln Ala Thr Cys Ser Gly Pro Arg Gln Ala Cys <210> 3364 <211> 209 <212> PRT <213> Homo sapiens <400> 3364 Met Ile Thr Arg Glu His Thr Asp Thr Phe Thr Ser Thr Val Cys Thr

Gln Arg Lys Cys Leu Leu Asn Gln Arg Ala His Ile Ser Ser Pro Pro

Pro Cys Val Arg Arg Glu Ser Ala Ser Ser Thr Arg Glu His Thr Tyr

Leu His Leu His Arg Val Tyr Ala Glu Lys Ala Pro Pro Gln Pro Glu Ser Thr Gln Ile Pro Ser Pro Pro Pro Ser Thr Val Cys Met Gln Arg Lys Cys Leu Leu Asn Gln Arg Ala His Ile Ser Ser Pro Pro Cys Val Arg Arg Glu Ser Ala Ser Ser Thr Arg Glu His Thr Tyr Leu His Leu His Arg Val Tyr Ala Glu Lys Val Pro Pro Gln Pro Glu Ser Thr His Ile Phe Thr Cys Thr Val Cys Thr Gln Arg Lys Cys Leu Leu Asn Gln Arg Ala His Ile Ser Ser Pro Pro Pro Cys Val Arg Arg Glu Ser Ala Ser Ser Thr Arg Glu His Thr Tyr Leu His Leu His Cys Val Tyr Ala Glu Lys Val Pro Pro Gln Pro Glu Gly Thr Gln Ile Ser Ser Pro Pro Pro Cys Val Arg Arg Glu Ser Ala Ser Ser Thr Arg Gly Phe Gln

Leu

<210> 3365

<211> 1263

<212> PRT

<213> Homo sapiens

<400	ຸ 3	36	5
<41///	<i>></i> J	่อบ	U

<400)> 33	305													
Met	Pro	Arg	Lys	Gly	Thr	Gln	Pro	Ser	Thr	Ala	Arg	Arg	Arg	Glu	Glu
1				5					10					15	
Gly	Pro	Pro	Pro	Pro	Ser	Pro	Asp	Gly	Ala	Ser	Ser	Asp	Ala	Glu	Pro
			20					25					30		
Glu	Pro	Pro	Ser	Gly	Arg	Thr	Glu	Ser	Pro	Ala	Thr	Ala	Ala	Ala	Met
		35					40					45			
Thr	Asn	Glu	Ala	Gly	Ala	Pro	Arg	Leu	Met	Ile	Thr	His	Ile	Val	Asn
	50					55					60				
Gln	Asn	Phe	Lys	Ser	Tyr	Ala	Gly	Glu	Lys	Ile	Leu	Gly	Pro	Phe	His
65					70					75					80
Lys	Arg	Phe	Ser	Cys	Ile	Ile	Gly	Pro	Asn	Gly	Ser	Gly	Lys	Ser	Asn
				85					90					95	
Val	Ile	Asp	Ser	Met	Leu	Phe	Val	Phe	Gly	Tyr	Arg	Ala	Gln	Lys	Ile
			100					105					110		
Arg	Ser	Lys	Lys	Leu	Ser	Val	Leu	Ile	His	Asn	Ser	Asp	Glu	His	Lys
		115					120					125			
Asp	Ile	Gln	Ser	Cys	Thr	Val	Glu	Val	His	Phe	Gln	Lys	Ile	Ile	Asp
	130					135					140				
Lys	Glu	Gly	Asp	Asp	Tyr	Glu	Val	Ile	Pro	Asn	Ser	Asn	Phe	Tyr	Val
145					150					155					160
Ser	Arg	Thr	Ala	Cys	Arg	Asp	Asn	Thr	Ser	Val	Tyr	His	Ile	Ser	Gly
				165					170					175	
Lys	Lys	Lys	Thr	Phe	Lys	Asp	Val	Gly	Asn	Leu	Leu	Arg	Ser	His	Gly
			180					185					190		
Ile	Asp	Leu	Asp	His	Asn	Arg	Phe	Leu	Ile	Leu	Gln	Gly	Glu	Val	Glu
		195					200					205			
Gln	Ile	Ala	Met	Met	Lys	Pro	Lys	Gly	Gln	Thr	Glu	His	Asp	Glu	Gly
	210					215					220				

Met	Leu	Glu	Tyr	Leu	Glu	Asp	Ile	Ile	Gly	Cys	Gly	Arg	Leu	Asn	Glu
225					230					235					240
Pro	Ile	Lys	Val	Leu	Cys	Arg	Arg	Val	Glu	Ile	Leu	Asn	Glu	His	Arg
				245					250					255	
Gly	Glu	Lys	Leu	Asn	Arg	Val	Lys	Met	Val	Glu	Lys	Glu	Lys	Asp	Ala
			260					265					270		
Leu	Glu	Gly	Glu	Lys	Asn	Ile	Ala	Ile	Glu	Phe	Leu	Thr	Leu	Glu	Asn
		275					280					285			
Glu	Ile	Phe	Arg	Lys	Lys	Asn	His	Val	Cys	Gln	Tyr	Tyr	Ile	Tyr	Glu
	290					295					300				
Leu	Gln	Lys	Arg	Ile	Ala	Glu	Met	Glu	Thr	Gln	Lys	Glu	Lys	Ile	His
305					310					315					320
Glu	Asp	Thr	Lys	Glu	Ile	Asn	Glu	Lys	Ser	Asn	Ile	Leu	Ser	Asn	Glu
				325					330					335	
Met	Lys	Ala	Lys	Asn	Lys	Asp	Val	Lys	Asp	Thr	Glu	Lys	Lys	Leu	Asn
			340					345					350		
Lys	Ile	Thr	Lys	Phe	Ile	Glu	Glu	Asn	Lys	Glu	Lys	Phe	Thr	Gln	Leu
		355					360					365			
Asp	Leu	Glu	Asp	Val	Gln	Val	Arg	Glu	Lys	Leu	Lys	His	Ala	Thr	Sei
	370					375					380				
Lys	Ala	Lys	Lys	Leu	Glu	Lys	Gln	Leu	Gln	Lys	Asp	Lys	Glu	Lys	Val
385					390					395					400
Glu	Glu	Phe	Lys	Ser	Ile	Pro	Ala	Lys	Ser	Asn	Asn	Ile	Ile	Asn	Glu
				405					410					415	
Thr	Thr	Thr	Arg	Asn	Asn	Ala	Leu	Glu	Lys	Glu	Lys	Glu	Lys	Glu	Glu
			420					425					430		
Lys	Lys	Leu	Lys	Glu	Val	Met	Asp	Ser	Leu	Lys	Gln	Glu	Thr	Gln	Gly
		435					440					445			
Leu	Gln	Lvs	Glu	Lvs	Glu	Ser	Arg	Glu	Lvs	Glu	Leu	Met	Glv	Phe	Ser

	450					455					460				
Lys	Ser	Val	Asn	Glu	Ala	Arg	Ser	Lys	Met	Asp	Val	Ala	Gln	Ser	Glu
465					470					475					480
Leu	Asp	Ile	Tyr	Leu	Ser	Arg	His	Asn	Thr	Ala	Val	Ser	Gln	Leu	Thr
				485					490					495	
Lys	Ala	Lys	Glu	Ala	Leu	Ile	Ala	Ala	Ser	Glu	Thr	Leu	Lys	Glu	Arg
			500					505					510		
Lys	Ala	Ala	Ile	Arg	Asp	Ile	Glu	Gly	Lys	Leu	Pro	Gln	Thr	Glu	Gln
		515					520					525			
Glu	Leu	Lys	Glu	Lys	Glu	Lys	Glu	Leu	Gln	Lys	Leu	Thr	Gln	Glu	Glu
	530					535					540				
Thr	Asn	Phe	Lys	Ser	Leu	Val	His	Asp	Leu	Phe	Gln	Lys	Val	Glu	Glu
545					550					555					560
Ala	Lys	Ser	Ser	Leu	Ala	Met	Asn	Arg	Ser	Arg	Gly	Lys	Val	Leu	Asp
				565					570					575	
Ala	Ile	Ile	Gln	Glu	Lys	Lys	Ser	Gly	Arg	Ile	Pro	Gly	Ile	Tyr	Gly
			580					585					590		
Arg	Leu	Gly	Asp	Leu	Gly	Ala	Ile	Asp	Glu	Lys	Tyr	Asp	Val	Ala	Ile
		595					600					605			
Ser	Ser	Cys	Cys	His	Ala	Leu	Asp	Tyr	Ile	Val	Val	Asp	Ser	Ile	Asp
	610					615					620				
Ile	Ala	Gln	Glu	Cys	Val	Asn	Phe	Leu	Lys		Gln	Asn	Ile	Gly	
625					630					635					640
Ala	Thr	Phe	Ile		Leu	Asp	Lys	Met		Val	Trp	Ala	Lys	Lys	Met
				645					650					655	
Thr	Glu	Ile		Thr	Pro	Glu	Asn		Pro	Arg	Leu	Phe		Leu	Val
		_	660		_			665			_		670	-	
Lys	Val		Asp	Glu	Lys	Ile		Gln	Ala	Phe	Tyr		Ala	Leu	Arg
		675					680					685			

Asp	Thr	Leu	Val	Ala	Asp	Asn	Leu	Asp	Gln	Ala	Thr	Arg	Val	Ala	Tyr
	690					695					700				
Gln	Lys	Asp	Arg	Arg	Trp	Arg	Val	Val	Thr	Leu	Gln	Gly	Gln	Ile	Ile
705					710					715					720
Glu	Gln	Ser	Gly	Thr	Met	Thr	Gly	Gly	Gly	Ser	Lys	Val	Met	Lys	Gly
				725					730					735	
Arg	Met	Gly	Ser	Ser	Leu	Val	Ile	Glu	Ile	Ser	Glu	Glu	Glu	Val	Asn
			740					745					750		
Lys	Met	Glu	Ser	Gln	Leu	Gln	Asn	Asp	Ser	Lys	Lys	Ala	Met	Gln	Ile
		755					760					765			
Gln	Glu	Gln	Lys	Val	Gln	Leu	Glu	Glu	Arg	Val	Val	Lys	Leu	Arg	His
	770					775					780				
Ser	Glu	Arg	Glu	Met	Arg	Asn	Thr	Leu	Glu	Lys	Phe	Thr	Ala	Ser	Ile
785					790					795					800
Gln	Arg	Leu	Ile	Glu	Gln	Glu	Glu	Tyr	Leu	Asn	Val	Gln	Val	Lys	Glu
				805					810					815	
Leu	Glu	Ala	Asn	Val	Leu	Ala	Thr	Ala	Pro	Asp	Lys	Lys	Lys	Gln	Lys
			820					825					830		
Leu	Leu	Glu	Glu	Asn	Val	Ser	Ala	Phe	Lys	Thr	Glu	Tyr	Asp	Ala	Val
		835					840					845			
Ala	Glu	Lys	Ala	Gly	Lys	Val	Glu	Ala	Glu	Val	Lys	Arg	Leu	His	Asn
	850					855					860				
Thr	Ile	Val	Glu	Ile	Asn	Asn	His	Lys	Leu	Lys	Ala	Gln	Gln	Asp	Lys
865					870					875					880
Leu	Asp	Lys	Ile	Asn	Lys	Gln	Leu	Asp	Glu	Cys	Ala	Ser	Ala	Ile	Thr
				885					890					895	
Lys	Ala	Gln	Val	Ala	Ile	Lys	Thr	Ala	Asp	Arg	Asp	Leu	Gln	Lys	Ala
			900					905					910		
Gln	Asn	Ser	Val	Leu	Arg	Thr	Glu	Lvs	Glu	He	Lvs	Asp	Thr	Glu	Lvs

	915					920					925			
Glu Val	Asp	Asp	Leu	Thr	Ala	Glu	Leu	Lys	Ser	Leu	Glu	Asp	Lys	Ala
930					935					940				
Ala Glu	Val	Val	Lys	Asn	Thr	Asn	Ala	Ala	Glu	Glu	Ser	Leu	Pro	Glu
945				950					955					960
Ile Gln	Lys	Glu	His	Arg	Asn	Leu	Leu	Gln	Glu	Leu	Lys	Val	Ile	Gln
			965					970					975	
Glu Asn	Glu	His	Ala	Leu	Gln	Lys	Asp	Ala	Leu	Ser	Ile	Lys	Leu	Lys
		980					985					990		
Leu Glu	Gln	Ile	Asp	Gly	His	Ile	Ala	Glu	His	Asn	Ser	Lys	Ile	Lys
	995					1000					1005			
Tyr Trp	His	Lys	Glu	Ile	Ser	Lys	Ile	Ser	Leu	His	Pro	Ile	Glu	Asp
1010				-	1015					1020				
Asn Pro	Ile	Glu	Glu	Ile	Ser	Val	Leu	Ser	Pro	Glu	Asp	Leu	Glu	Ala
1025				1030				-	1035				-	1040
Ile Lys	Asn	Pro	Asp	Ser	Ile	Thr	Asn	Gln	Ile	Ala	Leu	Leu	Glu	Ala
			1045					1050					1055	
Arg Cys	His	Glu	Met	Lys	Pro	Asn	Leu	Gly	Ala	Ile	Ala	Glu	Tyr	Lys
	:	1060					1065					1070		
Lys Lys	Glu	Glu	Leu	Tyr	Leu	Gln	Arg	Val	Ala	Glu	Leu	Asp	Lys	Ile
, ,	1075					1080					1085			
Thr Tyr	Glu	Arg	Asp	Ser	Phe	Arg	Gln	Ala	Tyr	Glu	Asp	Leu	Arg	Lys
1090					1095					1100				
Gln Arg	Leu	Asn	Glu	Phe	Met	Ala	Gly	Phe	Tyr	Ile	Ile	Thr	Asn	Lys
1105				1110					1115					1120
Leu Lys	Ġlu	Asn	Tyr	Gln	Met	Leu	Thr	Leu	Gly	Gly	Asp	Ala	Glu	Leu
			1125					1130					1135	
Glu Leu	Val	Asp	Ser	Leu	Asp	Pro	Phe	Ser	Glu	Gly	Ile	Met	Phe	Ser
		1140					1145					1150		

Val Arg Pro Pro Lys Lys Ser Trp Lys Lys Ile Phe Asn Leu Ser Gly 1155 1160 1165 Gly Glu Lys Thr Leu Ser Ser Leu Ala Leu Val Phe Ala Leu His His 1175 1180 1170 Tyr Lys Pro Thr Pro Leu Tyr Phe Met Asp Glu Ile Asp Ala Ala Leu 1190 1195 1200 1185 Asp Phe Lys Asn Val Ser Ile Val Ala Phe Tyr Ile Tyr Glu Gln Thr 1210 1215 1205 Lys Asn Ala Gln Phe Ile Ile Ile Ser Leu Arg Asn Asn Met Phe Glu 1220 1225 1230 Ile Ser Asp Arg Leu Ile Gly Ile Tyr Lys Thr Tyr Asn Ile Thr Lys 1245 1235 1240 Ser Val Ala Val Asn Pro Lys Glu Ile Ala Ser Lys Gly Leu Cys 1250 1255 1260

<210> 3366

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3366

Met Pro Leu Gly Arg Leu Ala Gly Ser Ala Arg Ser Glu Glu Gly Ser

1 5 10 15

Glu Ala Phe Leu Glu Gly Met Val Asp Trp Glu Leu Ser Arg Leu Gln
20 25 30

Arg Gln Cys Lys Val Met Glu Gly Glu Arg Arg Ala Tyr Ser Lys Glu
35 40 45

Val His Gln Arg Ile Asn Lys Gln Leu Glu Glu Ile Arg Arg Leu Glu

	50					55					60				
Glu	Val	Arg	Gly	Asp	Leu	Gln	Val	Gln	Ile	Ser	Ala	Ala	Gln	Asn	Gln
65					70					75					80
Val	Lys	Arg	Leu	Arg	Asp	Ser	Gln	Arg	Leu	Glu	Asn	Met	Asp	Arg	Leu
				85					90					95	
Leu	Lys	Gly	Arg	Ala	Gln	Val	Gln	Ala	Glu	Ile	Glu	Glu	Leu	Gln	Glu
			100					105					110		
Gln	Thr	Arg	Ala	Leu	Asp	Lys	Gln	Ile	Gln	Glu	Trp	Glu	Thr	Arg	Ile
		115					120					125			
Phe	Thr	His	Ser	Lys	Asn	Val	Arg	Ser	Pro	Gly	Phe	Ile	Leu	Asp	Gln
	130					135					140				
Lys	Val	Lys	Ile	Arg	Arg	Arg	Ile	Arg	Ile	Leu	Glu	Asn	Gln	Leu	Asp
145					150					155					160
Arg	Val	Thr	Cys	His	Phe	Asp	Asn	Gln	Leu	Val	Arg	Asn	Ala	Ala	Leu
				165					170					175	
Arg	Glu	Glu	Leu	Asp	Leu	Leu	Arg	Ile	Asp	Arg	Asn	Arg	Tyr	Leu	Asn
			180					185					190		
Val	Asp	Arg	Lys	Leu	Lys	Lys	Glu	Ile	His	His	Leu	His	His	Leu	Val
		195					200					205			
Ser	Thr	Leu	Ile	Leu	Ser	Ser	Thr	Ser	Ala	Tyr	Ala	Val	Arg	Glu	Glu
	210					215					220				
Ala	Lys	Ala	Lys	Met	Gly	Leu	Leu	Arg	Glu	Arg	Ala	Glu	Lys	Glu	Glu
225					230					235					240
Ala	Gln	Ser	Glu	Met	Glu	Ala	Gln	Val	Leu	Gln	Arg	Gln	Ile	Leu	His
				245					250					255	
Leu	Glu	Gln	Leu	His	His	Phe	Leu	Lys	Leu	Lys	Asn	Asn	Asp	Arg	Gln
			260					265					270		
Pro	Asp	Pro	Asp	Val	Leu	Glu	Lys	Arg	Glu	Lys	Gln	Ala	Gly	Glu	Val
		275					280					285			

Ala Glu Gly Val Trp Lys Thr Ser Gln Glu Arg Leu Val Leu Cys Tyr Glu Asp Ala Leu Asn Lys Leu Ser Gln Leu Met Gly Glu Ser Asp Pro Asp Leu Leu Val Gln Lys Tyr Leu Glu Thr Phe Pro Leu Cys Leu Ala Val Tyr Phe Cys Val Pro Pro Ala Val Ser Ser His Thr Ser Leu Ser Leu <210> 3367 <211> 178 <212> PRT <213> Homo sapiens <400> 3367 Met Glu Thr Gly Pro Ser Glu Glu Pro Ser Gly Arg Lys Glu Ser Gln Glu Met Cys Pro Pro Gly Leu Leu Val Phe Ala Gly Ser Ser Glu Gln Asp Ala Asn Leu Ala Lys Gln Phe Trp Ile Ser Ala Ser Met Tyr Pro

Pro Ser Glu Ser Gln Leu Val Leu Arg Arg Asp Ser Ser Gln Arg Leu

Pro Val Ala Arg Pro Arg Arg Ser Arg Gly Ser Glu Asn Ser His Ser

Ser Gln Ser Phe His Leu Ala Ser Asn Lys Asn Arg Asp Ile Phe Ala

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85 90 95 Glu Ala Leu Lys Ile Gln Glu Ser Glu Glu Lys Val Lys Tyr Leu Gln 100 105 110 Lys Thr Arg Ser His Ser Val Thr Gln Asn Glu Val Gln Trp His Asp 115 120 125 His Gly Ser Leu Gln Pro Gln Leu Ser Arg Ile Gln Ala Lys Thr Arg 130 135 140 Glu Glu Ile Leu Gln Leu Leu Arg Lys Gln Arg Glu Glu Arg Ile Ser 145 150 155 160 Lys Glu Leu Ile Ser Leu Pro Tyr Lys Pro Lys Ala Lys Glu His Lys 165 170 175 Ala Glu

<210> 3368 <211> 129

<212> PRT

<213> Homo sapiens

<400> 3368

Met Lys Arg Lys Gln Phe Lys Thr Phe Gly Leu Asn Asn Ala Ile Ile

1 5 10 15

Phe Pro Glu Met Leu His Leu Arg Ser Thr Val Ser Leu Ser Ile Gly
20 25 30

Asp Ile Cys Lys Cys Leu Arg Gly Val Phe Val Phe Cys Leu Phe Val

35 40 45

Cys Leu Phe Val Cys Leu Phe Leu Arg Trp Ser Leu Ile Leu Ser Pro 50 55 60 Lys Leu Glu Asp Ser Ser Arg Ile Ser Ala His Cys Asn Leu Ser Leu Leu Gly Ser Ser Asp Ser Pro Asp Ser Ala Ser Gln Val Ala Lys Ile Thr Gly Met His His His Ile Gln Leu Thr Phe Val Phe Leu Val Glu Thr Arg Phe Leu Gln Cys Trp Pro Gly Trp Ser Gln Thr Pro Asp Leu Arg <210> 3369 <211> 230 <212> PRT <213> Homo sapiens

<400> 3369

Met Pro Phe Pro Ile Leu Trp Pro Arg Thr Pro Thr Asn Val Pro Ile Ala Arg Val Gln Gly Pro Gly Ile Pro Pro Pro Ala Cys Val Ser His Cys Arg Pro Pro Ser Pro Asp Ser Ala Pro Arg Thr Val Val Leu Pro Pro Arg Thr Leu Pro Leu Ser Val Ser Ser Leu Pro Gly Leu Cys Pro Ser Arg Cys Arg Pro Pro Ser Pro Asp Ser Ala Pro Leu Gly Val

Val Leu Pro Pro Arg Thr Leu Pro Leu Ser Val Ser Ser Ser Leu Pro

Gly Leu Cys Pro Ser Arg Cys Arg Pro Pro Ser Pro Asp Ser Ala Pro Leu Gly Val Val Leu Pro Pro Arg Thr Leu Pro Leu Ser Val Ser Ser Ser Leu Pro Gly Leu Cys Pro Ser Arg Cys Arg Pro Pro Ser Pro Asp Ser Ala Ser Leu Gly Val Val Leu Pro Pro Arg Thr Leu Pro Leu Val Leu Ser Ser Ser Leu Pro Gly Leu Cys Leu Ser Arg Cys Arg Pro Pro Ser Pro Asp Ser Ala Pro Leu Gly Val Val Leu Pro Pro Arg Thr Leu Pro Leu Ser Val Ser Ser Ser Leu Pro Gly Leu Cys Leu Ser His Cys Arg Pro Pro Ser Pro Asp Ser Trp Asn Cys Val Ser Ser Leu Ser Pro Ile Leu Thr Leu Arg Ser

<210> 3370

<211> 389

<212> PRT

<213> Homo sapiens

<400> 3370

Met Ser Glu Ile Arg Phe Thr Asn Leu Thr Trp Asp Gln Val Ile Thr
1 5 10 15

Leu	Asp	GIn	Val	Leu	Asp	Glu	Val	He	Pro	He	His	Gly	Lys	Gly	Asn
			20					25					30		
Phe	Pro	Thr	Met	Glu	Val	Lys	Pro	Lys	Asp	Ile	Ile	His	Val	Val	Lys
		35					40					45			
Asp	Gln	Leu	Ile	Gly	Gln	Gly	Ile	Ile	Val	Lys	Asp	Ala	Arg	Leu	Asn
	50					55					60				
Gly	Ser	Val	Ala	Ser	Tyr	Ile	Leu	Ala	Ser	His	Asn	Gly	Ile	Ser	Tyr
65					70					75					80
Lys	Asp	Leu	Asp	Val	Ile	Phe	Gly	Val	Glu	Leu	Pro	Gly	Asn	Glu	Glu
				85					90					95	
Phe	Gln	Val	Val	Lys	Asp	Ala	Val	Leu	Asp	Cys	Leu	Leu	Asp	Phe	Leu
			100					105					110		
Pro	Lys	Asp	Val	Lys	Lys	Glu	Lys	Leu	Ser	Pro	Asp	Ile	Met	Lys	Asp
		115					120					125			
Ala	Tyr	Val	Gln	Lys	Leu	Val	Lys	Val	Cys	Asn	Gly	His	Asp	Cys	Trp
	130					135					140				
Ser	Leu	Ile	Ser	Leu	Ser	Asn	Asn	Thr	Gly	Lys	Asn	Leu	Glu	Leu	Lys
145					150					155					160
Phe	Val	Ser	Ser	Leu	Arg	Arg	Gln	Phe	Glu	Phe	Ser	Val	Asp	Ser	Phe
				165					170					175	
Gln	Ile	Val	Leu	Asp	Pro	Met	Leu	Glu	Phe	Tyr	Ser	Asp	Lys	Asn	Ala
			180					185					190		
Lys	Leu	Thr	Lys	Glu	Ser	Tyr	Pro	Val	Val	Val	Ala	Glu	Ser	Met	Tyr
		195					200					205			
Gly	Asp	Phe	Gln	Glu	Ala	Met	Thr	His	Leu	Gln	His	Lys	Leu	Ile	Cys
	210					215					220				
Thr	Arg	Lys	Pro	Glu	Glu	Ile	Arg	Gly	Gly	Gly	Leu	Leu	Lys	Tyr	Cys
225					230					235					240
Ser	Leu	Leu	Val	His	Gly	Phe	Lys	Pro	Ala	Cys	Met	Ser	Glu	Ile	Lys

Asn Leu Glu Arg Tyr Met Cys Ser Arg Phe Phe Ile Asp Phe Pro His Ile Glu Glu Gln Gln Lys Lys Ile Glu Ser Tyr Leu His Asn His Phe Ile Gly Glu Gly Met Thr Lys Tyr Asp Tyr Leu Met Thr Leu His Gly Val Val Asn Glu Ser Thr Val Cys Leu Met Ser Tyr Glu Arg Arg Gln Ile Leu His Leu Ile Thr Met Met Ala Leu Lys Val Leu Gly Glu Leu Asn Ile Leu Pro Asn Thr Gln Lys Val Thr Cys Phe Tyr Gln Pro Ala Pro Tyr Phe Ala Ala Glu Ala Arg Tyr Pro Ile Tyr Val Ile Pro Glu Pro Pro Pro Val Ser Phe Gln Pro Tyr His Pro Leu His Phe Arg Gly Ser Asn Gly Met Ser

<210> 3371

<211> 1350

<212> PRT

<213> Homo sapiens

<400> 3371

Met Ser Ser Pro Arg Leu Ile Pro Leu Trp Lys Asp Leu Lys Leu Leu 1 5 10 15

Leu	Asn	Asp	Thr	Ile	Asn	Lys	Ser	Lys	Gln	Pro	Ser	Glu	Asp	Pro	Lys
			20					25					30		
Asn	Cys	Leu	Ile	Val	Leu	Ser	Asp	Arg	Ser	Gln	Ala	Val	Ala	Trp	Met
		35					40					45			
Lys	Ser	Lys	Thr	Glu	Asp	Met	Val	Glu	Lys	Arg	Thr	Phe	Ser	Met	Thr
	50					55					60				
Glu	Arg	Leu	Pro	Pro	Ile	Gln	Ser	Met	Val	His	Ala	Gly	Ser	Phe	His
65					70					75					80
Ile	Leu	Val	Val	Tyr	Cys	Gly	Asp	Leu	Ile	Leu	Arg	Leu	Phe	Gly	Asp
				85					90					95	
His	Phe	Arg	Ala	Phe	Lys	Pro	Leu	Gly	Lys	Val	Pro	Cys	Arg	Phe	Asn
			100					105					110		
Ile	Ser	Cys	Leu	Cys	Tyr	Asp	Pro	Glu	Met	Lys	Met	Leu	Leu	Ser	Gly
		115					120					125			
Ile	Leu	Gly	Ala	Val	Val	Thr	Trp	Val	Ile	Glu	Leu	Gly	Gly	Thr	Gly
	130					135					140				
Leu	Gln	Ile	Ala	His	Met	Val	Ser	Met	Pro	Gly	Asp	Glu	Leu	Val	Gln
145					150					155					160
Asp	Ile	Val	Leu	Asn	Gly	Pro	Ser	Gly	Ser	Leu	Leu	Ala	Leu	Cys	Glu
				165					170					175	
Ala	Val	Val	Arg	Val	Leu	Met	His	Gln	Gly	Lys	Gly	Gln	Leu	Gly	Glu
			180					185					190		
Val	Lys	Arg	Phe	Thr	Ser	Thr	Ser	Ser	Gly	Ser	Ser	Ile	Thr	Cys	Cys
		195					200					205			
Phe	Thr	Cys	Phe	Asp	Gln	Gly	Phe	Leu	Tyr	Ala	Gly	Asn	Gln	Ala	Gly
	210					215					220				
Glu	Ile	Gln	Val	Trp	Ser	Leu	Gln	Gln	Gly	His	Pro	Leu	His	Ser	Phe
225					230					235					240
Gln	Ala	His	Gln	Ser	Glv	Val	He	Cvs	He	Arg	Ser	Arg	Pro	Glu	Ala

				245					250					255	
His	Thr	Leu	Leu	Thr	Ala	Gly	Ser	Asp	Ser	Leu	Ile	Lys	Glu	Trp	Asn
			260					265					270		
Leu	Thr	Ser	Gly	Ser	Leu	Leu	Arg	Arg	Leu	Glu	Leu	Gly	Glu	Glu	Leu
		275					280					285			
Tyr	Arg	Leu	Gln	Phe	Ile	Asp	Ser	Ile	Thr	Phe	Phe	Cys	Gln	Thr	Ala
	290					295					300				
His	Ser	Phe	Ser	Leu	His	Arg	Leu	Pro	Cys	Phe	Tyr	Ser	Leu	Phe	Asn
305					310					315					320
Val	Cys	Gly	Ser	Ala	Pro	Gln	Gln	Leu	Arg	Arg	Val	Cys	Cys	Gly	Asn
				325					330					335	
Asn	Trp	Phe	Arg	Ile	Leu	Cys	Thr	Thr	Glu	Asp	Gly	Leu	Leu	Arg	Phe
			340					345					350		
Val	Ser	Pro	Val	Thr	Gly	Asp	Leu	Leu	Val	Ile	Thr	Trp	Pro	Phe	Ser
		355					360					365			
Ile	Leu	Asp	Gln	Ala	Val	Asp	Trp	Ala	Tyr	Asp	Pro	Gly	Lys	Glu	Glu
	370					375					380				
Leu	Phe	Val	Ala	Thr	Gly	Ser	Ser	Glu	Val	Leu	Val	Phe	Asp	Thr	Thr
385					390					395					400
Arg	Cys	Pro	Cys	Pro	Ala	Lys	Tyr	Leu	Leu	Gly	Thr	Ser	Pro	Asn	Ser
				405					410					415	
Gln	Asp	Phe	Val	Gln	Cys	Leu	Ala	Tyr	Gly	His	Phe	Asn	Leu	Gly	Arg
			420					425					430		
Gly	Leu	Glu	Gly	Leu	Ile	Phe	Ser	Gly	His	Gln	Ser	Gly	Val	Ile	Arg
		435					440					445			
Val	Leu	Ser	Gln	His	Ser	Cys	Ala	Arg	Leu	Glu	Lys	Phe	Met	His	Phe
	450					455					460				
Gly	Ala	Val	Leu	Ala	Leu	Ser	Thr	Leu	Ser	Gly	Gly	Ile	Phe	Gly	Gly
465					470					475					480

Gln	Gly	Asn	Ser	Leu	Leu	Cys	Ser	Tyr	Gly	Met	Asp	Asp	Tyr	Val	His
				485					490					495	
Leu	Ser	Glu	Ala	Val	Leu	Asp	Gly	Val	Lys	Val	Gln	Leu	Arg	Pro	Leu
			500					505					510		
Ala	Ser	Ile	Leu	Ser	Ser	Cys	His	Leu	Thr	His	Leu	Ile	Leu	Leu	Pro
		515					520					525			
Lys	Ser	Val	Gly	Ala	Ile	Thr	Glu	Thr	Asn	Cys	Leu	Arg	Leu	Trp	Lys
	530					535					540				
Phe	His	Asp	Phe	Leu	Ser	Ser	Gly	Ser	Gln	Asn	Gly	Leu	Lys	Phe	Ile
545					550					555					560
Glu	Thr	Leu	Pro	Leu	His	Leu	Cys	Ala	Ile	Thr	Ser	Phe	Asp	Val	Cys
				565					570					575	
Leu	Ser	Leu	Ser	Leu	Phe	Val	Thr	Gly	Ser	Ala	Asp	Gly	Ser	Val	Arg
			580					585					590		
Ile	Trp	Asp	Phe	His	Gly	Arg	Leu	Ile	Ala	Ile	Leu	Asp	Ser	Ser	Leu
		595					600					605			
His	Phe	Gly	Pro	Val	Cys	Phe	Ala	Asn	Asp	Arg	Gly	Asp	Leu	Leu	Val
	610					615					620				
Thr	Phe	Asn	Gln	Ser	Leu	Tyr	Leu	Val	Ser	Cys	Leu	Lys	Leu	Leu	Pro
625					630					635					640
Pro	Ala	Leu	Leu	Thr	Arg	Leu	Ser	Phe	Met	Ser	Ile	Ser	Asp	Glu	Val
				645					650					655	
Leu	Glu	Val	Pro	Lys	Pro	Phe	Ile	Pro	Ser	Phe	Phe	Phe	Ser	Phe	Glu
			660					665					670		
Thr	Met	Phe	Val	Pro	Lys	Tyr	Ile	Tyr	Pro	Gly	Gln	Ala	Gln	Gln	Lys
		675					680					685			
Leu	Val	Gly	Leu	Glu	Lys	Leu	Val	Asn	Asn	Arg	Ala	Ile	Ala	Phe	Asp
	690					695					700				
His	Ser	Val	Pro	His	Val	Ile	Glu	Glu	Asp	Glu	Glu	Gly	Ser	Pro	Val

705					710					715					720
Leu	Leu	Arg	Ser	Ser	Met	His	Tyr	Ser	Leu	Gln	Asp	Met	Glu	Asp	Trp
				725					730					735	
Met	Gln	Val	Ser	Lys	Arg	Tyr	Gln	Cys	His	Tyr	Val	Leu	Pro	Pro	Gln
			740					745					750		
Leu	Gln	Leu	Thr	Ser	Trp	Asp	Gly	Leu	Asn	Pro	Tyr	Gln	Ile	Leu	Arg
		755					760					765			
Tyr	Tyr	Phe	Gly	His	Gly	Arg	Glu	Trp	Leu	Phe	Ala	Pro	Asp	Cys	Tyr
	770					775					780				
Ile	Pro	Asn	Ser	Val	Ile	Arg	Ala	Arg	Leu	Trp	Pro	Glu	Gly	Thr	Pro
785					790					795					800
Ile	Tyr	Leu	Gln	Cys	Asn	Leu	His	Ala	Pro	Gln	Arg	Glu	Leu	Glu	Trp
				805					810					815	
Asp	Arg	Ser	Gln	Glu	Phe	Phe	Phe	Trp	His	Ser	Arg	Val	Arg	Ala	Ile
			820					825					830		
Ser	Asn	Thr	Glu	Tyr	Pro	Lys	Asn	Lys	Glu	Glu	Asp	Glu	His	Phe	Leu
		835					840					845			
Glu	Met	Arg	Leu	Ser	Lys	Asp	Val	Thr	Tyr	Ser	Val	Leu	Thr	Asp	Gly
	850					855					860				
Ala	Asn	Arg	Ser	Trp	Leu	Gly	Arg	Lys	Met	Ser	Glu	Ile	Thr	Ile	Asn
865					870					875					880
Ser	Met	Ile	Glu	Thr	Met	Leu	Asn	Ile	Met	Val	His	Ala	Ser	Leu	Leu
				885					890					895	
Lys	Tyr	Gln	Cys	Cys	Val	Gly	Ala	Leu	Gly	Gln	Ile	Phe	Ala	Ser	Tyr
			900					905					910		
Gln	Val	Ser	Pro	Ala	Leu	Arg	Ser	Glu	Thr	Ala	Arg	Arg	Leu	Leu	Asn
		915					920					925			
Asp	Thr	Thr	Asn	Ser	Asn	Pro	Leu	Ile	Arg	Glu	Leu	Ala	Trp	Glu	Gly
	930					935					940				

Leu	Lys	Arg	Leu	Gly	Met	Ile	Thr	His	Leu	Phe	Ala	Met	Pro	Leu	Ala
945					950					955					960
Gln	Gly	Leu	Met	Asp	Lys	Asp	Glu	Arg	Val	Arg	Ile	Lys	Thr	Leu	Ser
				965					970					975	
Leu	Met	Ala	Glu	Ile	Gly	Ile	His	Ser	Arg	Thr	Ser	Leu	Leu	Gln	Leu
			980					985					990		
Thr	Gln	Lys	Gln	Glu	Thr	Phe	Arg	Glu	Met	Gln	Gln	Gln	Met	Ile	Gly
		995				-	1000				-	1005			
Glu	Glu	Pro	Leu	Asp	His	Leu	Leu	Gly	Met	Arg	Ala	Thr	Asp	Leu	Gln
	1010]	1015				-	1020				
Ile	Leu	Ser	Thr	Gln	Val	Glu	Gln	Arg	Leu	Asn	Glu	Asn	Leu	Thr	Leu
102	5				1030				-	1035					1040
Ser	His	Arg	Asp	Glu	Lys	Pro	Ala	Phe	Ser	Leu	Asp	Val	Ser	Met	Pro
				1045				-	1050					1055	
Ser	Glu	Leu	Lys	Ser	Ser	Leu	Lys	Pro	Pro	Thr	Val	Ser	Glu	Glu	Ser
			1060]	1065					1070		
Glu	Val	Ala	Ile	Lys	Pro	Ser	Lys	Gly	Gln	Arg	Arg	Gly	Gln	Ala	Gly
]	1075					1080				-	1085			
Val	Lys	Lys	His	Ser	Gln	Lys	Trp	Leu	Arg	Gly	Leu	Lys	Lys	Thr	Lys
	1090				-	1095				-	1100				
Glu	Arg	Asp	Ser	Lys	Gln	Met	Ser	Thr	Glu	Pro	Gly	Leu	Leu	Glu	Asp
110	5				1110					1115				-	1120
Glu	Ser	Gly	Thr	Glu	Ala	Ala	Pro	Ile	Glu	Met	Glu	Glu	Ala	Ser	Val
				1125				-	1130					1135	
Tyr	Ser	Gln	Trp	Ser	Ser	Ser	Thr	Ser	Val	Ile	Lys	Leu	Ser	Lys	Asp
			1140					1145					1150		
Val	Asp	Ser	Gln	Glu	Lys	Asp	Ile	Ser	Lys	Asp	His	Ile	Ala	Leu	Thr
		1155					1160					1165			
Len	Lvs	Ara	Leu	Gln	Lve	Tle	Aro	Asn	Lve	Aro	Asn	Lve	Lve	Ala	Thr

1180

Ala Gln Lys Leu Lys Lys Lys His Lys Lys Lys Gly Lys Glu Ala Lys
1185 1190 1195 1200

1175

Val Ile Asn Glu Glu Thr Thr Pro Pro Val Met Glu Gln Pro Val Thr
1205 1210 1215

Lys Lys Val Lys Ile Gln Gly Arg Gly Ala Ser Gly Ile Ser Gly Arg 1220 1225 1230

Arg Ser Thr Ala Gly Asp Gly Ser Ser Trp Arg Asp Asp Leu Cys Arg 1235 1240 1245

Leu Met Ala Leu Arg Ile Ser Gly Ser Gln Thr Lys Met Ser Glu Asn 1250 1255 1260

Leu Asn Ala Glu Leu Val Thr Phe Ala Gln Glu Met Leu Val Asp Arg 1265 1270 1275 1280

His Pro Ser Trp Glu Leu Phe Gln Glu Ile Cys Pro Leu Leu Lys Lys 1285 1290 1295

Glu Ser Lys Val Leu Leu Glu Asp Leu Asp Trp Asp Val Val Pro Pro 1300 1305 1310

Glu Lys Lys Pro Ile Phe Ile Gln Glu Gly Ala Ile Arg Glu Asp Met 1315 1320 1325

Ile Gln Gly Val Thr Gln Glu Val Ile Arg His Lys Glu Val Met Pro 1330 1335 1340

Arg Glu Glu Glu Gln Ala 1345 1350

<210> 3372

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<213> Homo sapiens

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Val Asn Phe Ser Asp Glu Val Thr Ala Gly Leu Arg Ile Ser Asp Gly

	210					215					220				
Val	Val	Leu	Phe	Ile	Asp	Ala	Ala	Glu	Gly	Val	Met	Leu	Asn	Thr	Glu
225					230					235					240
Arg	Leu	Ile	Lys	His	Ala	Val	Gln	Glu	Arg	Leu	Ala	Val	Thr	Val	Cys
				245					250					255	
Ile	Asn	Lys	Ile	Asp	Arg	Leu	Ile	Leu	Glu	Leu	Lys	Leu	Pro	Pro	Thr
			260					265					270		
Asp	Ala	Tyr	Tyr	Lys	Leu	Arg	His	Ile	Val	Asp	Glu	Val	Asn	Gly	Leu
		275					280					285			
Ile	Ser	Met	Tyr	Ser	Thr	Asp	Glu	Asn	Leu	Ile	Leu	Ser	Pro	Leu	Leu
	290					295					300				
Gly	Asn	Val	Cys	Phe	Ser	Ser	Ser	Gln	Tyr	Ser	Ile	Cys	Phe	Thr	Leu
305					310					315					320
Gly	Ser	Phe	Ala	Lys	Ile	Tyr	Ala	Asp	Thr	Phe	Gly	Asp	Ile	Asn	Tyr
				325					330					335	
Gln	Glu	Phe	Ala	Lys	Arg	Leu	Trp	Gly	Asp	Ile	Tyr	Phe	Asn	Pro	Lys
			340					345					350		
Thr	Arg	Lys	Phe	Thr	Lys	Lys	Ala	Pro	Thr	Ser	Ser	Ser	Gln	Arg	Ser
•		355					360					365			
Phe	Val	Glu	Phe	Ile	Leu	Glu	Pro	Leu	Tyr	Lys	Ile	Leu	Ala	Gln	Val
	370					375					380				
Val	Gly	Asp	Val	Asp	Thr	Ser	Leu	Pro	Arg	Thr	Leu	Asp	Glu	Leu	Gly
385					390					395					400
Ile	His	Leu	Thr	Lys	Glu	Glu	Leu	Lys	Leu	Asn	Ile	Arg	Pro	Leu	Leu
				405					410					415	
Arg	Leu	Val	Cys	Lys	Lys	Phe	Phe	Gly	Glu	Phe	Thr	Gly	Phe	Val	Asp
			420					425					430		
Met	Cys	Val	Gln	His	Ile	Pro	Ser	Pro	Lys	Val	Gly	Ala	Lys	Pro	Lys
		435					440					445			

Ile	Glu	His	Thr	Tyr	Thr	Gly	Gly	Val	Asp	Ser	Asp	Leu	Gly	Glu	Ala
	450					455					460				
Met	Ser	Asp	Cys	Asp	Pro	Asp	Gly	Pro	Leu	Met	Cys	His	Thr	Thr	Lys
465					470					475					480
Met	Tyr	Ser	Thr	Asp	Asp	Gly	Val	Gln	Phe	His	Ala	Phe	Gly	Arg	Val
				485					490					495	
Leu	Ser	Gly	Thr	Ile	His	Ala	Gly	Gln	Pro	Val	Lys	Val	Leu	Gly	Glu
			500					505					510		
Asn	Tyr	Thr	Leu	Glu	Asp	Glu	Glu	Asp	Ser	Gln	Ile	Cys	Thr	Val	Gly
		515					520					525			
Arg	Leu	Trp	Ile	Ser	Val	Ala	Arg	Tyr	His	Ile	Glu	Val	Asn	Arg	Val
	530					535					540				
Pro	Ala	Gly	Asn	Trp	Val	Leu	Ile	Glu	Gly	Val	Asp	Gln	Pro	Ile	Val
545					550					555					560
Lys	Thr	Ala	Thr	Ile	Thr	Glu	Pro	Arg	Gly	Asn	Glu	Glu	Ala	Gln	Ιlϵ
				565					570					575	
Phe	Arg	Pro	Leu	Lys	Phe	Asn	Thr	Thr	Ser	Val	Ile	Lys	Ile	Ala	Val
			580					585					590		
Glu	Pro	Val	Asn	Pro	Ser	Glu	Leu	Pro	Lys	Met	Leu	Asp	Gly	Leu	Arg
		595					600					605			
Lys	Val	Asn	Lys	Ser	Tyr	Pro	Ser	Leu	Thr	Thr	Lys	Val	Glu	Glu	Ser
•	610					615					620				
Gly	Glu	His	Val	Ile	Leu	Gly	Thr	Gly	Glu	Leu	Tyr	Leu	Asp	Cys	Val
625					630					635					640
Met	His	Asp	Leu	Arg	Lys	Met	Tyr	Ser	Glu	Ile	Asp	Ile	Lys	Val	Ala
				645					650					655	
Asp	Pro	Val	Val	Thr	Phe	Cys	Glu	Thr	Val	Val	Glu	Thr	Ser	Ser	Leu
			660					665					670		
Lys	Val	Leu	Cys												

675

<210> 3373

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3373

Met Ser Pro Val Thr Val Gln Lys Gly Gln Arg Leu Leu Leu

1 5 10 15

Pro Ala Arg Pro Gln Pro His Ser Arg Arg Ala Pro Pro Gln Gln Ser

20 25 30

Ser Ser Pro Gly Gln Gly Val Glu Gly Asp Gly Gly Leu Arg Ile Gly

35 40 45

Gly Pro Val Leu Val Pro Ser Pro Gly Cys Ala Gly Leu Asp Thr Ser

50 55 60

Val Arg Glu Gly Cys Gly Trp Trp Gly Arg Pro Gly Gly Leu Ala Asn

65 70 75 80

Gly Ser Val Phe Pro Arg Ala Pro Ser Val Gly Ala Ala Ala Thr Ser

85 90 95

Arg Pro Cys Ala Leu Val Leu Thr Gly Leu Asp Val Leu Arg Gly Leu

100 105 110

Gly Val His Ser Ser Arg Pro Phe Leu His Arg Arg Gly Phe Ser Asp

115 120 125

Leu Glu Gly Gln Ala Ala Ala Pro Lys Leu Arg Ala Pro Ser His

130 135 140

His Ala Gln Leu Gly Pro Val Trp Ala Ala Ala Pro Ser His Arg Val

145 150 155 160

Val Gln Ala Trp Thr Cys Leu Pro Ser Ala Ala Gly Ala Pro Ala Leu 170 175 165 Ala Ser Ala Leu Gly Ser Ala Pro Leu Pro Thr His Pro His Leu Pro 190 180 185 Ala Pro Ile Pro Ser Ser Gln Leu Ala Leu Pro Phe Leu Gly Leu Ser 205 195 200 Pro Ala Leu Gly Ala Ala Ser Ala Arg Asp Pro Pro Pro Ala Thr Ser 220 210 215 Arg Lys Ala Ala Ala Trp Thr Ser Ser Ser Ala Cys Leu Cys Ala Pro 230 235 240 225 Trp Gly Leu Arg Arg Gly Trp Ser Cys Val Ser Ser Arg Gly Gln Asp 250 255 245 Lys Gly Gly Leu Pro Leu Ala Ala Leu Val Leu Ser Cys Leu Asp Gln 260 265 270 Lys Thr Ile Gln Thr Val Ser Leu Phe Leu Ile 280 275

<210> 3374

<211> 958

<212> PRT

<213> Homo sapiens

<400> 3374

Met Gln Val Ser Ala Glu Met Pro Leu Ile Leu Thr Asp His Pro Gly

1 5 10 15

Arg Thr Gly Arg Pro Thr Leu Pro Gly Lys Val Thr Glu Glu Ile Val

20 25 30

Ser Ser Glu His Asp Glu Gly Leu Ser Phe Ser Gly Lys Val Gln Cys

		35					40					45			
Tyr	Gly	Arg	Glu	Leu	Asn	Gln	Pro	Ala	Ser	Ala	Ala	Lys	Cys	Thr	Gly
	50					55					60				•
Asp	Phe	Ser	Pro	Ser	Pro	Glu	Lys	Leu	Val	Lys	Ser	Gly	Asn	Pro	Leu
65					70					75					80
Gln	Pro	Val	Ser	Ile	Glu	Asn	Arg	Asn	Leu	Asp	Leu	Lys	His	Leu	Val
				85					90					95	
Leu	Glu	Ser	Ser	Glu	Pro	Pro	Phe	Gly	Pro	Arg	Asn	Val	Ile	Glu	Asn
			100					105					110		
Lys	Ser	Leu	Ser	Asp	Thr	Leu	Val	Ser	Thr	Thr	Ala	Pro	Ser	Gly	Ile
		115					120					125			•
Val	Asn	Val	Ser	Val	Lys	Gln	Gln	Thr	Ser	Pro	Lys	Ser	Ser	Gln	Asn
	130					135					140				
His	Leu	Phe	Pro	Gly	Asp	Leu	Lys	Thr	Asp	Glu	Gly	Ile	Tyr	Leu	Gln
145					150					155					160
Val	Lys	Ser	Leu	Thr	Ala	Ala	Ser	Val	Asp	Gly	Ala	Tyr	Ser	Thr	Gln
				165					170					175	
Gly	Cys	Met	Cys	Ser	Val	Val	Pro	Thr	Leu	Cys	Ser	Ser	Ser	Asp	Asn
			180					185					190		
Ala	Thr	Leu	Thr	His	Tyr	Val	Arg	Pro	Ile	Asn	Ala	Glu	Pro	Ala	Phe
		195					200					205			
Gln	Ala	Gln	Glu	Ile	Pro	Ala	Gly	Arg	Met	Ala	Ser	Leu	Leu	Lys	Asn
	210					215					220				
Gly	Glu	Pro	Glu	Ala	Glu	Leu	His	Lys	Glu	Thr	Thr	Gly	Pro	Gly	Thr
225					230					235					240
Ala	Gly	Pro	Gln	Ser	Asn	Thr	Thr	Ser	Ser	Leu	Lys	Gly	Glu	Arg	Lys
				245					250					255	
Ala	Ile	His	Thr	Leu	Gln	Asp	Val	Ser	Thr	Cys	Glu	Thr	Lys	Glu	Leu
			260					265					270		

Leu	Asn	Val	Gly	Val	Ser	Ser	Leu	Cys	Ala	Gly	Pro	Tyr	Gln	Asn	Thr
		275					280					285			
Ala	Asp	Thr	Lys	Glu	Asn	Leu	Ser	Lys	Glu	Pro	Leu	Ala	Ser	Phe	Val
	290					295					300				
Ser	Glu	Ser	Phe	Asp	Thr	Ser	Val	Cys	Gly	Ile	Ala	Thr	Glu	His	Val
305					310					315					320
Glu	Ile	Glu	Asn	Ser	Gly	Glu	Gly	Leu	Arg	Ala	Glu	Ala	Gly	Ser	Glu
				325					330					335	
Thr	Leu	Gly	Arg	Asp	Gly	Glu	Val	Gly	Val	Asn	Ser	Asp	Met	His	Tyr
			340					345					350		
Glu	Leu	Ser	Gly	Asp	Ser	Asp	Leu	Asp	Leu	Leu	Gly	Asp	Cys	Arg	Asn
		355					360					365			
Pro	Arg	Leu	Asp	Leu	Glu	Asp	Ser	Tyr	Thr	Leu	Arg	Gly	Ser	Tyr	Thr
	370					375					380				
Arg	Lys	Lys	Asp	Val	Pro	Thr	Asp	Gly	Tyr	Glu	Ser	Ser	Leu	Asn	Phe
385					390					395					400
His	Asn	Asn	Asn	Gln	Glu	Asp	Trp	Gly	Cys	Ser	Ser	Trp	Val	Pro	Gly
				405					410					415	
Met	Glu	Thr	Ser	Leu	Pro	Pro	Gly	His	Trp	Thr	Ala	Ala	Val	Lys	Lys
			420					425					430		
Glu	Glu	Lys	Cys	Val	Pro	Pro	Tyr	Val	Gln	Ile	Arg	Asp	Leu	His	Gly
		435					440					445			
Ile	Leu	Arg	Thr	Tyr	Ala	Asn	Phe	Ser	Ile	Thr	Lys	Glu	Leu	Lys	Asp
	450					455					460				
Thr	Met	Arg	Thr	Ser	His	Gly	Leu	Arg	Arg	His	Pro	Ser	Phe	Ser	Ala
465					470					475					480
Asn	Cys	Gly	Leu	Pro	Ser	Ser	Trp	Thr	Ser	Thr	Trp	Gln	Val	Ala	Asp
				485					490					495	
Acr	I Au	Thr	Gln	Acr	Thr	Ī AU	Acn	Ī AII	Glu	Tur	Ī Au	Ara	Phe	Ala	Hic

			500					505					510		
Lys	Leu	Lys	Gln	Thr	Ile	Lys	Asn	Gly	Asp	Ser	Gln	His	Ser	Ala	Ser
		515					520					525			
Ser	Ala	Asn	Val	Phe	Pro	Lys	Glu	Ser	Pro	Thr	Gln	Ile	Ser	Ile	Gly
	530					535					540				
Ala	Phe	Pro	Ser	Thr	Lys	Ile	Ser	Glu	Ala	Pro	Phe	Leu	His	Pro	Ala
545					550					555					560
Pro	Arg	Ser	Arg	Ser	Pro	Leu	Leu	Val	Thr	Val	Val	Glu	Ser	Asp	Pro
				565					570					575	
Arg	Pro	Gln	Gly	Gln	Pro	Arg	Arg	Gly	Tyr	Thr	Ala	Ser	Ser	Leu	Asp
			580					585					590		
Ser	Ser	Ser	Ser	Trp	Arg	Glu	Arg	Cys	Ser	His	Asn	Arg	Asp	Leu	Arg
		595					600					605			
Asn	Ser	Gln	Arg	Asn	His	Thr	Val	Ser	Phe	His	Leu	Asn	Lys	Leu	Lys
	610					615					620				
Tyr	Asn	Ser	Thr	Val	Lys	Glu	Ser	Arg	Asn	Asp	Ile	Ser	Leu	Ile	Leu
625					630					635					640
Asn	Glu	Tyr	Ala	Glu	Phe	Asn	Lys	Val	Met	Lys	Asn	Ser	Asn	Gln	Phe
				645					650					655	
Ile	Phe	Gln	Asp	Lys	Glu	Leu	Asn	Asp	Val	Ser	Gly	Glu	Ala	Thr	Ala
			660					665					670		
Gln	Glu	Met	Tyr	Leu	Pro	Phe	Pro	Gly	Arg	Ser	Ala	Ser	Tyr	Glu	Asp
		675					680					685			
Ile	Ile	Ile	Asp	Val	Cys	Thr	Asn	Leu	His	Val	Lys	Leu	Arg	Ser	Val
	690					695					700				
Val	Lys	Glu	Ala	Cys	Lys	Ser	Thr	Phe	Leu	Phe	Tyr	Leu	Val	Glu	Thr
705					710					715					720
Glu	Asp	Lys	Ser	Phe	Phe	Val	Arg	Thr	Lys	Asn	Leu	Leu	Arg	Lys	Gly
				725					730					735	

Gly	His	Thr	Glu	Ile	Glu	Pro	Gln	His	Phe	Cys	Gln	Ala	Phe	His	Arg
			740					745					750		
Glu	Asn	Asp	Thr	Leu	Ile	Ile	Ile	Ile	Arg	Asn	Glu	Asp	Ile	Ser	Ser
		755					760					765			
His	Leu	His	Gln	Ile	Pro	Ser	Leu	Leu	Lys	Leu	Lys	His	Phe	Pro	Ser
	770					775					780				
Val	Ile	Phe	Ala	Gly	Val	Asp	Ser	Pro	Gly	Asp	Val	Leu	Asp	His	Thr
785					790					795					800
Tyr	Gln	Glu	Leu	Phe	Arg	Ala	Gly	Gly	Phe	Val	Ile	Ser	Asp	Asp	Lys
				805					810					815	
Ile	Leu	Glu	Ala	Val	Thr	Leu	Val	Gln	Leu	Lys	Glu	Ile	Ile	Lys	Ile
			820					825					830		
Leu	Glu	Lys	Leu	Asn	Gly	Asn	Gly	Arg	Trp	Lys	Trp	Leu	Leu	His	Tyr
		835					840					845			
Arg	Glu	Asn	Lys	Lys	Leu	Lys	Glu	Asp	Glu	Arg	Val	Asp	Ser	Thr	Ala
	850					855					860				
His	Lys	Lys	Asn	Ile	Met	Leu	Lys	Ser	Phe	Gln	Ser	Ala	Asn	Ile	Ile
865					870					875					880
Glu	Leu	Leu	His	Tyr	His	Gln	Cys	Asp	Ser	Arg	Ser	Ser	Thr	Lys	Ala
				885		•			890					895	
Glu	Ile	Leu	Lys	Cys	Leu	Leu	Asn	Leu	Gln	Ile	Gln	His	Ile	Asp	Ala
			900					905					910		
Arg	Phe	Ala	Val	Leu	Leu	Thr	Asp	Lys	Pro	Thr	Ile	Pro	Arg	Glu	Val
		915					920					925			
Phe	Glu	Asn	Ser	Gly	Ile	Leu	Val	Thr	Asp	Val	Asn	Asn	Phe	Ile	Glu
	930					935					940				
Asn	Ile	Glu	Lys	Ile	Ala	Ala	Pro	Phe	Arg	Ser	Ser	Tyr	Trp		
945					950					955					

<210> 3375

<211> 402

<212> PRT

<213> Homo sapiens

<400> 3375

Met Ser Phe Glu Glu Leu Cys Tyr Lys Asn Pro Lys Met Ala Ile Gln

1 5 10 15

Lys Ile Ser Asp Asp Tyr Lys Ile Tyr Cys Glu Lys Ala Pro Lys Ile
20 25 30

Asp Phe Lys Met Glu Ile Ile Lys Glu Thr Lys Thr Val Ser Arg Ser

35 40 45

Asn Arg Lys Met Ser Leu Leu Lys Arg Thr Leu Val Arg Lys Pro Ser 50 55 60

Met Arg Pro Arg Asn Leu Thr Glu Val Leu Leu Asn Thr Gln His Leu 65 70 75 80

Glu Phe Phe Arg Glu Phe Leu Lys Glu Arg Lys Ala Lys Ile Pro Leu 85 90 95

Gln Phe Leu Thr Ala Val Gln Lys Ile Ser Ile Glu Thr Asn Glu Lys
100 105 110

Ile Cys Lys Ser Leu Ile Glu Asn Val Ile Lys Thr Phe Phe Gln Gly
115 120 125

Gln Leu Ser Pro Glu Glu Met Leu Gln Cys Asp Ala Pro Ile Ile Lys 130 135 140

Glu Ile Ala Ser Met Arg His Val Thr Thr Ser Thr Leu Leu Thr Leu 145 150 155 160

Gln Gly His Val Met Lys Ser Ile Glu Glu Lys Trp Phe Lys Asp Tyr

165 170 175

Gln Asp Leu	Phe Pro	Pro His	His Glr	Glu Val	Glu Val	Gln Ser	Glu
	180		185	•		190	
Val Gln Ile	Ser Ser	Arg Lys	Pro Sei	Lys Ile	Val Ser	Thr Tyr	Leu
195			200		205		
Gln Glu Ser	Gln Lys	Lys Gly	Trp Met	Arg Met	Ile Ser	Phe Ile	Arg
210		215			220		
Ser Phe Cys	Lys Tyr	Arg Arg	Phe Met	Leu Asn	Pro Ser	Lys Arg	Gln
225		230		235			240
Glu Phe Glu	Asp Tyr	Leu His	Gln Glu	ı Met Gln	Asn Ser	Lys Glu	Asn
	245			250		255	
Phe Thr Thr	Ala His	Asn Thr	Ser Gly	Arg Ser	Ala Pro	Pro Ser	Thr
	260		265	5		270	
Asn Val Arg	Ser Ala	Asp Gln	Glu Asr	ı Gly Glu	Ile Thr	Leu Val	Lys
275			280		285		
Arg Arg Ile	Phe Gly	His Arg	Ile Ile	Thr Val	Asn Phe	Ala Ile	Asn
290		295			300		
Asp Leu Tyr	Phe Phe	Ser Glu	Met Glu	ı Lys Phe	Asn Asp	Leu Val	Ser
305		310		315			320
Ser Ala His	Met Leu	Gln Val	Asn Arg	g Ala Tyr	Asn Glu	Asn Asp	Val
	325			330		335	
Ile Leu Met	Arg Ser	Lys Met	Asn Ile	e Ile Gln	Lys Leu	Phe Leu	Asn
	340		345	5		350	
Ser Asp Ile	Pro Pro	Lys Leu	Arg Va	Asn Val	Pro Glu	Phe Gln	Lys
355			360		365		
Asp Ala Ile	Leu Ala	Ala Ile	Thr Glu	ı Gly Tyr	Leu Asp	Arg Ser	Val
370		375			380		
Phe His Gly	Ala Ile	Met Ser	Val Phe	e Pro Val	Val Met	Tyr Phe	Trp
385		390		395			400
Lys Arg							

<210> 3376

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3376

Met Ile Ser Val Ser Thr Pro Asp Cys Arg Gln Ser Arg Val Glu Gly

1 5 10 15

Pro Arg Arg Val Gly Thr Gly Gly Gln Asp Pro Arg Thr Thr His Ser

20 25 30

Pro Ala Gly Trp Lys Gln Met Ala Pro Pro His Pro Cys Pro Pro Ser

35 40 45

Trp Gln Ser Ala Pro Arg Thr Gly Gln Thr Ser Ser Arg Gly Trp Pro

50 55 60

Gly Cys Gly His Pro Leu Val Gly Ala Ser Asn Gly Ala Arg Arg Gly

65 70 75 80

Ala Trp His Ala Lys Ser Trp His Arg Val Arg Ala Val Thr His Leu

85 90 95

Ser His Ala Trp Arg Pro Leu His Ala Thr Arg Leu Pro Cys Pro Ala

100 105 110

Val Glu Leu Val Thr Met Arg Gln Gly Arg Ala Gly Met Ala

115 120 125

<210> 3377

<211> 614

<212> PRT

<213> Homo sapiens

<400> 3377

Met Glu Asn Asp Pro Gln Glu Ala Glu Ser Glu Met Ala Leu Asp Ala 1 5 10 15

Glu Phe Leu Asp Val Tyr Lys Asn Cys Asn Gly Val Val Met Met Phe
20 25 30

Asp Ile Thr Lys Gln Trp Thr Phe Asn Tyr Ile Leu Arg Glu Leu Pro
35 40 45

Lys Val Pro Thr His Val Pro Val Cys Val Leu Gly Asn Tyr Arg Asp
50 55 60

Met Gly Glu His Arg Val Ile Leu Pro Asp Asp Val Arg Asp Phe Ile
65 70 75 80

Asp Asn Leu Asp Arg Pro Pro Gly Ser Ser Tyr Phe Arg Tyr Ala Glu

85 90 95

Ser Ser Met Lys Asn Ser Phe Gly Leu Lys Tyr Leu His Lys Phe Phe 100 105 110

Asn Ile Pro Phe Leu Gln Leu Gln Arg Glu Thr Leu Leu Arg Gln Leu
115 120 125

Glu Thr Asn Gln Leu Asp Met Asp Ala Thr Leu Glu Glu Leu Ser Val 130 135 140

Gln Gln Glu Thr Glu Asp Gln Asn Tyr Gly Ile Phe Leu Glu Met Met 145 150 155 160

Glu Ala Arg Ser Arg Gly His Ala Ser Pro Leu Ala Ala Asn Gly Gln 165 170 175

Ser Pro Ser Pro Gly Ser Gln Ser Pro Val Val Pro Ala Gly Ala Val 180 185 190

Ser Thr Gly Ser Ser Ser Pro Gly Thr Pro Gln Pro Ala Pro Gln Leu

		195					200					205			
Pro	Leu	Asn	Ala	Ala	Pro	Pro	Ser	Ser	Val	Pro	Pro	Val	Pro	Pro	Ser
	210					215					220				
Glu	Ala	Leu	Pro	Pro	Pro	Ala	Cys	Pro	Ser	Ala	Pro	Ala	Pro	Arg	Arg
225					230					235					240
Ser	Ile	Ile	Ser	Arg	Leu	Phe	Gly	Thr	Ser	Pro	Ala	Thr	Glu	Ala	Ala
				245					250					255	
Pro	Pro	Pro	Pro	Glu	Pro	Val	Pro	Ala	Ala	Gln	Gly	Pro	Ala	Thr	Val
			260					265					270		
Gln	Ser	Val	Glu	Asp	Phe	Val	Pro	Asp	Asp	Arg	Leu	Asp	Arg	Ser	Phe
		275					280					285			
Leu	Glu	Asp	Thr	Thr	Pro	Ala	Arg	Asp	Glu	Lys	Lys	Val	Gly	Ala	Lys
	290					295					300				
Ala	Ala	Gln	Gln	Asp	Ser	Asp	Ser	Asp	Gly	Glu	Ala	Leu	Gly	Gly	Asn
305					310					315					320
Pro	Met	Val	Ala	Gly	Phe	Gln	Asp	Asp	Val	Asp	Leu	Glu	Asp	Gln	Pro
				325					330					335	
Arg	Gly	Ser	Pro	Pro	Leu	Pro	Ala	Gly	Pro	Val	Pro	Ser	Gln	Asp	Ile
			340					345					350		
Thr	Leu	Ser	Ser	Glu	Glu	Glu	Ala	Glu	Val	Ala	Ala	Pro	Thr	Lys	Ser
		355					360					365			
Pro	Ala	Pro	Ala	Pro	Gln	Gln	Cys	Ser	Glu	Pro	Glu	Thr	Lys	Trp	Ser
	370					375					380				
Ser	Ile	Pro	Ala	Ser	Lys	Pro	Arg	Arg	Gly	Thr	Ala	Pro	Thr	Arg	Thr
385					390					395					400
Ala	Ala	Pro	Pro	Trp	Pro	Gly	Gly	Val	Ser	Val	Arg	Thr	Gly	Pro	Glu
				405					410					415	
Lys	Arg	Ser	Ser	Thr	Arg	Pro	Pro	Ala	Glu	Met	Glu	Pro	Gly	Lys	Gly
			420					425					430		

Glu Gln Ala Ser Ser Glu Ser Asp Pro Glu Gly Pro Ile Ala Ala Gln Met Leu Ser Phe Val Met Asp Asp Pro Asp Phe Glu Ser Glu Gly Ser Asp Thr Gln Arg Arg Ala Asp Asp Phe Pro Val Arg Asp Asp Pro Ser Asp Val Thr Asp Glu Asp Glu Gly Pro Ala Glu Pro Pro Pro Pro Pro Lys Leu Pro Leu Pro Ala Phe Arg Leu Lys Asn Asp Ser Asp Leu Phe Gly Leu Gly Leu Glu Glu Ala Gly Pro Lys Glu Ser Ser Glu Glu Gly Lys Glu Gly Lys Thr Pro Ser Lys Glu Lys Lys Lys Lys Lys Lys Gly Lys Glu Glu Glu Lys Ala Ala Lys Lys Lys Ser Lys His Lys Lys Ser Lys Asp Lys Glu Glu Gly Lys Glu Glu Arg Arg Arg Arg Gln Gln Arg Pro Pro Arg Ser Arg Glu Arg Thr Ala Ala Asp Glu Leu Glu Ala Phe Leu Gly Gly Gly Ala Pro Gly Gly Arg His Pro Gly Gly Gly Asp Tyr Glu Glu Leu

<210> 3378

<211> 799

<212> PRT

<213> Homo sapiens

<400> 3378

Met Ser Glu Arg Thr Gln Glu Gln Asp Phe Val Ile Ile Thr Val Asp

1 5 10 15

Asp Ser Asp Asp Asn Asn Asp Cys Ser Ile Glu Met Val Glu Val Ser
20 25 30

Glu Thr Ala Asp Asn Ser Thr Asn Asp Ile Ala Asp Asp Ser Thr Tyr

35 40 45

Val Thr Ala Asp Asn Pro Thr Asp Asp Thr Ala Thr Gln Pro Asn Phe
50 55 60

Pro Gly Gly Asn Asp Gly His His Arg Pro Leu Gln Met Ser Tyr Gly
65 70 75 80

Ser Gly Ser Val Thr Gln Ala Gly Val Gln Trp His Asp His Ser Ser 85 90 95

Leu Gln Pro Gln Pro Leu Gly Leu Lys Gln Phe Phe His Leu Ser Leu
100 105 110

Pro Ser Ser Trp Asp Asp Arg Arg Thr Pro Pro Cys Pro Val Ala His
115 120 125

Gly Asp Gln Ile Val Ser Gln Ile Asn His Pro Val His Leu Arg Arg 130 135 140

Tyr Ser Tyr Asn Ser Glu Glu Val Asp Leu Pro Lys Arg Gly Arg Phe
145 150 155 160

Tyr Thr Pro Glu Val Gln Ser Ser Ile Ser Pro Pro Ala Glu Arg Gln
165 170 175

Glu Thr His Ala Trp Ala Ser Pro Ala Val Thr Ser Leu Glu Ser Ala 180 185 190

Ala Cys His Glu Leu Gln Glu Ala Asp Leu Ser Glu Ser Leu Ser Tyr 195 200 205

Pro	Arg	Ile	Val	Ser	Ser	Ser	Ser	Leu	Gln	Gln	Tyr	Val	Ala	Gln	Gly
	210					215					220				
Gly	Ser	Phe	Pro	Cys	Phe	Gly	Met	Ser	Trp	Asn	Phe	Ile	Ser	Gly	Gly
225					230					235					240
Ala	Glu	Ser	Thr	Asn	Ala	Val	Ile	Ser	Phe	Ala	Asn	Ala	Thr	Thr	Ala
				245					250					255	
Val	Pro	Met	Ala	Val	Leu	Ser	Arg	Arg	Glu	Ser	Ser	Leu	Ala	Asn	Asn
			260					265					270		
Pro	Gly	Val	Val	Asn	Tyr	Ser	Ala	Leu	Pro	Glu	Asn	Glu	Asn	Val	Gly
		275					280					285			
Pro	Gly	Arg	Ala	Leu	Ser	Ser	Phe	Cys	Phe	His	Pro	Asn	Leu	Glu	Met
	290					295					300				
Pro	Glu	Arg	Pro	Ala	Asn	Ser	Ser	Lys	Asn	Ser	Thr	Glu	Thr	Ala	Asn
305					310					315					320
Tyr	Pro	Thr	Leu	Met	Gly	Asn	Tyr	Asn	Gly	Gln	Asn	Thr	Ala	Ser	Leu
				325					330					335	
Ser	Val	Phe	Ile	Pro	Pro	Tyr	Phe	Ala	Glu	Lys	Ile	Ile	Leu	Thr	Glu
			340					345					350		
Met	Pro	Gly	Thr	Thr	Glu	Thr	Asn	Val	Glu	Asn	Asn	Ser	Gln	Thr	Val
		355					360					365			
Tyr	Tyr	Pro	Ala	Leu	Ser	Gly	Asn	Thr	Ser	Ala	Pro	Tyr	Pro	Ala	Ser
	370					375					380				
Ser	Tyr	Leu	Pro	Ile	Thr	Ser	Asn	Phe	Glu	Ser	Gly	Pro	Gln	Met	Ser
385					390					395					400
Tyr	Gly	Thr	Met	Ser	Tyr	Ser	Thr	Glu	Met	Lys	Asn	Asn	Cys	Asp	Gln
				405					410					415	
Asp	Asp	Ala	Ser	Ala	Ser	Ala	Cys	Leu	Thr	Pro	Asp	Phe	Ala	Leu	Leu
			420					425					430		
Pro	Leu	Asn	Ile	Leu	Val	Lvs	Val	Asp	Thr	Asn	Thr	Glu	Asn	Ser	Val

		435					440					445			
Asn	Thr	Met	Asn	Arg	Ser	Thr	Leu	Leu	Asp	Ser	Asp	Ser	Gly	Gln	Asp
	450					455					460				
Ser	Ser	Ser	Ser	Ser	Val	Cys	Ile	Pro	Pro	Lys	Tyr	Gly	Tyr	Leu	Gly
465					470					475					480
Asp	Pro	Lys	Arg	Asn	Val	Arg	Val	Leu	Lys	Ile	His	Leu	Leu	Ala	Val
				485					490					495	
Gln	Asn	Met	Ala	Lys	Pro	Lys	Gln	Ala	Ala	Cys	Tyr	Leu	Val	Arg	Ile
			500					505					510		
Leu	Phe	Ser	Lys	Glu	Ile	Leu	Ile	Ser	Ser	Ser	Val	Asp	Ile	His	Leu
		515					520					525			
Lys	Asp	Ser	Gln	Ser	Leu	Asp	Pro	Asn	Lys	Met	Ala	Ala	Leu	Arg	Glu
	530					535					540				
Tyr	Leu	Ala	Thr	Thr	Phe	Pro	Thr	Cys	Asp	Leu	His	Glu	His	Gly	Lys
545					550					555					560
Asp	Trp	Gln	Asp	Cys	Ile	Ser	Gly	Ile	Asn	Ser	Met	Ile	Tyr	Cys	Leu
				565					570					575	
Cys	Ser	Glu	Gly	Lys	Ser	Thr	Pro	Lys	Thr	Val	Arg	Lys	Asn	Lys	Lys
			580					585					590		
Arg	Thr	Asn	Arg	Val	Ala	Ser	Ala	Ser	Ala	Asp	Arg	Asn	Asp	Gln	Arg
		595					600					605			
Gly	Arg	Asp	Gly	Gly	Glu	Gly	Cys	Ser	Trp	Met	Phe	Gln	Pro	Met	Asn
	610					615					620				
Asn	Ser	Lys	Met	Arg	Glu	Lys	Arg	Asn	Leu	Gln	Pro	Asn	Ser	Asn	Ala
625					630					635					640
Ile	Pro	Glu	Gly	Met	Arg	Glu	Pro	Ser	Thr	Asp	Asn	Pro	Glu	Glu	Pro
				645					650					655	
Gly	Glu	Ala	Trp	Ser	Tyr	Phe	Gly	Arg	Pro	Trp	Arg	Asn	Ile	Arg	Met
			660					665					670		

Pro Cys Ser Val Leu Thr Leu Ala Lys Thr Lys Ser Cys Ala Ser Leu 680 675 685 Ser Ala Arg Tyr Leu Ile Gln Lys Leu Phe Thr Lys Asp Val Leu Val 690 695 700 Gln Ser Asn Val Tyr Gly Asn Leu Lys His Gly Leu Cys Ala Leu Asp 720 705 710 715 Pro Asn Lys Ile Ser Ala Leu Arg Glu Phe Leu Gln Glu Asn Tyr Pro 725 730 735 Ile Cys Asp Leu Ser Glu Asn Gly Arg Asp Trp Lys Ser Cys Val Thr 740 745 750 Ser Ile Asn Ser Gly Ile Arg Ser Leu Arg His Asp Val Arg Arg Ala 755 760 765 Glu Ala Arg Ser Gln Ser Leu Pro Ala Val Thr Pro Pro Glu Leu Glu 770 775 780 Gln Glu Ser Lys Pro Gly Asp Pro Asp Ala Thr Asp Pro Ser Thr 790 795 785

<210> 3379

<211> 216

<212> PRT

<213> Homo sapiens

<400> 3379

Met Gly Arg Gly Ala Pro Pro Leu Thr Pro Arg Leu Glu Ala Ala Gln

1 5 10 15

Pro Glu Arg Gln Gln Gln Asp Arg Gly Pro Gly Ser Gly Ala His Val

20 25 30

Ala Phe Arg Gly Arg Pro Ser Arg Gly Arg Gly His Gly Ala Ala Arg

Ala Arg Ser Ser Leu Gln Ala Pro Arg Val Ser Gly Ala Arg Gly Pro His Gly Asp Arg Arg Cys Phe Ser Ala Ala Pro Gly Leu Cys Pro Pro Thr Pro Arg Ala Pro Arg Pro Leu Pro Arg Gly Pro Ser Arg Ala Arg Arg Gly Glu Ala Glu Gly Pro Arg Ala Ile Ser Ala Ala Ser Arg Pro Thr Gly Ser Ser Ser Tyr Arg Gly Pro Ile Arg Ser Cys Ala Arg Ala Ser Pro Cys Cys Ala Arg Gln Ala Ser Pro Ala Leu Ala Pro Gly Arg Cys Pro Thr Pro Arg Gln Gly Arg Glu Ser Gly Gly Arg Ser Ala Ala Leu Arg Ala Gly Gly Arg Gly Ser Gln Thr Glu Cys Trp Pro Pro Glu Glu Ser Asn Pro Gly Phe Val Gln Ala Ile Thr Gly Trp Ala Trp Arg Gly Gly Ala Ser Gln Arg Ala Gly Val Trp Gly Ala Pro Gly Ala Ser Gly Gln Gly Arg Asp Val Ala Gly

<210> 3380

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3380

Met Arg Val Leu Gln Pro Glu Arg Pro Ser His Thr Ala Ser Gln His

1 5 10 15

Asn Gln Ser Val Lys Cys Gly His Ala Pro Leu Glu His Lys Ala Thr

20 25 30

Val Cys His Leu Cys Pro Cys Leu His Leu Gly Arg Arg Thr Ser

35 40 45

Leu Ile Cys Gly Leu Cys Pro His Gly Ser Tyr Asn Tyr Gln Thr Asn

50 55 60

Thr Thr Thr Glu Arg Leu Glu Gly Ser Ala Ser Ala Ser His Ile Tyr

65 70 75 80

Ala Ser Val Thr Arg Val Leu Ile Asn Leu Asn Ala Gln Ile Ile Gly

85 90 95

Ala Phe Leu Ala His Ser Leu

100

<210> 3381

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3381

Met Gly His Pro His Gln Glu Ser Ser Leu Phe Phe Thr Ala Ser Gly

1 5 10 15

Asn Leu Pro Leu Leu Leu Ser Leu Leu Ser Leu Met Gln Leu Arg Asn

20 25 30

Val Ser Glu Gln Glu Leu Asp Ser Val Ala Met Lys Leu Leu His Gln

		35					40					45			
Val	Ser	Lys	Leu	Cys	Gly	Lys	Cys	Ser	Pro	Thr	Asp	Val	Asp	Ile	Leu
	50					55					60				
Gln	Pro	Ser	Phe	Asn	Phe	Leu	Tyr	Trp	Ser	Leu	His	Gln	Thr	Thr	Pro
65					70					75					80
Ser	Ser	Gln	Lys	Arg	Ala	Ala	Ala	Val	Leu	Leu	Ser	Ser	Thr	Gly	Leu
				85					90					95	
Met	Glu	Leu	Leu	Glu	Lys	Met	Leu	Ala	Leu	Thr	Leu	Ala	Lys	Ala	Asp
			100					105					110		
Ser	Pro	Arg	Thr	Ala	Leu	Leu	Cys	Ser	Ala	Trp	Leu	Leu	Thr	Ala	Ser
		115					120					125			
Phe	Ser	Ala	Gln	Gln	His	Lys	Gly	Ser	Leu	Gln	Val	His	Gln	Thr	Leu
	130					135					140				
Ser	Val	Glu	Met	Asp	Gln	Val	Leu	Lys	Ala	Leu	Ser	Phe	Pro	Lys	Lys
145					150					155					160
Lys	Ala	Ala	Leu	Leu	Ser	Ala	Ala	Ile	Leu	Cys	Phe	Leu	Arg	Thr	Ala
				165					170					175	
Leu	Arg	Gln	Ser	Phe	Ser	Ser	Ala	Leu	Val	Ala	Leu	Val	Pro	Ser	Gly
			180					185					190		
Ala	Gln	Pro	Leu	Pro	Ala	Thr	Lys	Asp	Thr	Val	Leu	Ala	Pro	Leu	Arg
		195					200					205			
Met	Ser	Gln	Val	Arg	Ser	Leu	Val	Ile	Gly	Leu	Gln	Asn	Leu	Leu	Val
	210					215					220				
Gln	Lys	Asp	Pro	Leu	Leu	Ser	Gln	Thr	Cys	Val	Gly	Cys	Leu	Glu	Ala
225					230					235					240
Leu	Leu	Asp	Tyr	Leu	Asp	Ala	Arg	Ser	Pro	Asp	Ile	Ala	Leu	His	Val
				245					250					255	
Ala	Ser	Gln	Pro	Trp	Asn	Arg	Phe	Leu	Leu	Phe	Thr	Leu	Leu	Asp	Ala
			260					265					270		

Gly Glu Asn Ser Phe Leu Arg Pro Glu Ile Leu Arg Leu Met Thr Leu 275 280 285 Phe Met Arg Tyr Arg Ser Ser Ser Val Leu Ser His Glu Glu Val Gly 290 295 300 Asp Val Leu Gln Gly Val Ala Leu Ala Asp Leu Ser Thr Leu Ser Asn 305 310 315 320 Thr Thr Leu Gln Ala Leu His Gly Phe Phe Gln Gln Leu Gln Ser Met 325 330 335 Gly His Leu Ala Asp His Gly Met Ala Gln Thr Leu Gln Ala Ser Leu 340 345 350 Glu Gly Leu Pro Pro Ser Thr Ser Ser Gly Gln Pro Pro Leu Gln Asp 355 360 365 Met Leu Cys Leu Gly Gly Val Ala Val Ser Leu Ser His Ile Arg Asn

380

375

<210> 3382

370

<211> 822

<212> PRT

<213> Homo sapiens

<400> 3382

Met Glu Leu Glu Leu Asn Glu Lys Ile Asn Glu Glu Ile Thr His Ile

1 5 10 15

Gln Glu Glu Lys Gln Asp Ile Ile Ile Ser Phe Gln His Met Gln Gln
20 25 30

Leu Leu Arg Gln Gln Ile Gln Ala Asn Thr Glu Met Glu Ala Glu Leu
35 40 45

Lys Val Leu Lys Glu Asn Asn Gln Thr Leu Glu Arg Asp Asn Glu Leu

	50					55					60				
Gln	Arg	Glu	Lys	Val	Lys	Glu	Asn	Glu	Glu	Lys	Phe	Leu	Asn	Leu	Gln
65					70					75					80
Asn	Glu	His	Glu	Lys	Ala	Leu	Gly	Thr	Trp	Lys	Arg	His	Ala	Glu	Glu
				85					90					95	
Leu	Asn	Gly	Glu	Ile	Asn	Lys	Ile	Lys	Asn	Glu	Leu	Ser	Ser	Leu	Lys
			100					105					110		
Glu	Thr	His	Ile	Lys	Leu	Gln	Glu	His	Tyr	Asn	Lys	Leu	Cys	Asn	Gln
		115					120					125			
Lys	Thr	Phe	Glu	Glu	Asp	Lys	Lys	Phe	Gln	Asn	Val	Pro	Glu	Val	Asn
	130					135					140				
Asn	Glu	Asn	Ser	Glu	Met	Ser	Thr	Glu	Lys	Ser	Glu	Asn	Thr	Ile	Ile
145					150					155					160
Gln	Lys	Tyr	Asn	Thr	Glu	Gln	Glu	Ile	Arg	Glu	Glu	Asn	Met	Glu	Asn
				165					170					175	
Phe	Cys	Ser	Asp	Thr	Glu	Tyr	Arg	Glu	Lys	Glu	Glu	Lys	Lys	Glu	Gly
			180					185					190		
Ser	Phe	Ile	Glu	Glu	Ile	Ile	Ile	Asp	Asp	Leu	Gln	Leu	Phe	Glu	Lys
		195					200					205			
Ser	Phe	Lys	Asn	Glu	Ile	Asp	Thr	Val	Val	Ser	Gln	Asp	Glu	Asn	Gln
	210					215					220				
Ser	Glu	Ile	Ser	Leu	Ser	Lys	Thr	Leu	Ser	Leu	Asp	Lys	Glu	Val	Ile
225					230					235					240
Ser	Gln	Gly	Gln	Thr	Ser	Asn	Val	Thr	Asp	Asn	Arg	Lys	Ser	Val	Thr
				245					250					255	
Thr	Glu	Ile	Lys	Asp	Lys	Ile	Cys	Leu	Glu	Lys	Asp	Asn	Gly	Cys	Thr
			260					265					270		
Glu	Phe	Lys	Ser	Pro	Asn	Asn	His	Phe	Val	Val	Leu	Asp	Thr	Ala	Ile
		275					280					285			

Glu	Thr	Glu	Lys	Ile	His	Leu	Glu	Arg	Thr	Arg	Gly	Leu	Asp	Val	His
	290					295					300				
His	Thr	Asp	Val	Asn	Leu	Glu	Val	Glu	Asn	Asn	Lys	Thr	Ser	Phe	Asn
305					310					315					320
Ser	Ile	Leu	Asn	Glu	Thr	Ala	His	Asn	Thr	Tyr	His	Asn	Asn	Asn	Lys
				325					330					335	
Asp	Val	Ser	Glu	Asn	Glu	Pro	Phe	Lys	Gln	Phe	Arg	Leu	Leu	Pro	Gly
			340					345					350		
Thr	Arg	Glu	His	Ala	Leu	Glu	Lys	Glu	Ile	Thr	Asn	Ser	Asp	Gln	Thr
		355					360					365			
Lys	Ala	Asp	Leu	Asp	Ser	Ser	Leu	Asp	Ile	Lys	Lys	Asn	Pro	Val	Pro
	370					375					380				
Cys	Gln	Lys	Tyr	Ser	Leu	Arg	Asn	Ser	Ser	Asn	Val	Met	Leu	Asp	Asp
385					390					395					400
Lys	Gln	Cys	Lys	Ile	Lys	Gln	Ile	Gln	Leu	Leu	Thr	Lys	Lys	Ser	Glu
				405					410					415	
Cys	Ser	Ile	Leu	Leu	Ser	Lys	Gln	Thr	Ser	Asp	Phe	Leu	Gln	Val	Cys
			420					425					430		
Asn	Asp	Thr	Leu	Glu	Lys	Ser	Glu	Leu	Thr	Val	Pro	Cys	Asp	Ile	Val
		435					440					445			
Ile	Asp	His	His	Val	Ser	Tyr	Ala	Ala	Phe	Ser	Ala	Asn	Ser	Lys	Leu
	450					455					460				
Leu	Leu	Lys	Asn	Ser	Asp	Lys	Asn	Val	His	Ser	Met	Ser	Met	Leu	Val
465					470					475					480
Lys	Pro	Asn	Ser	Ser	Pro	Gly	Gly	Lys	Thr	Met	Cys	Lys	Asn	Met	Ser
				485					490					495	
Asp	Met	Gln	Asn	Ser	Gln	Phe	Asn	Asn	Cys	Leu	Gly	Tyr	Leu	Glu	Asn
			500					505					510		
Thr	Aen	Val	Asn	Tle	Ser	His	Len	His	Len	Asn	Asn	Glu	Asn	Ser	His

		515					520					525			
Ala	Ser	Gln	Ala	Lys	Asp	Val	Lys	Thr	Ala	Val	His	Met	Lys	Thr	Cys
	530					535					540				
Thr	Glu	Thr	Glu	Phe	Ser	Asn	Lys	Lys	Asn	Gln	Ile	Asp	Glu	Asn	Gln
545					550					555					560
Val	Thr	Glu	Ala	Thr	Lys	Asn	Asp	Leu	Phe	Leu	Phe	Val	Ser	Ile	Asn
				565					570					575	
Glu	Arg	Gln	His	Thr	Leu	Leu	Asn	Asn	Thr	Glu	Lys	Thr	Glu	Şer	Leu
			580					585					590		
Asn	Asp	Ile	Val	Ser	Gly	Lys	Met	Phe	Ser	Glu	Gly	Gln	Leu	Glu	Glu
		595					600					605			
Ser	His	Ser	Phe	His	Ile	Glu	Pro	Ser	Gly	Asp	Leu	Val	Asn	Arg	Ser
	610					615					620				
Gly	Arg	Ser	Thr	Phe	Asp	Leu	Ser	Thr	Ser	Asp	Lys	Lys	Thr	Glu	Lys
625					630					635					640
Thr	Pro	Val	Tyr	Met	Asn	Phe	Ser	Asp	Pro	Gly	Pro	Trp	Ser	Lys	Val
				645					650					655	
Asn	His	Ile	Glu	Ser	Gln	Thr	Ala	Ser	Ser	Ser	Thr	Pro	Cys	Ile	Ser
			660					665					670		
Leu	Leu	Leu	Lys	Glu	Arg	Pro	Leu	Asp	Pro	Ser	Glu	Asn	Lys	Lys	Ile
		675					680					685			
Ile	Ser	Met	Ala	Leu	Cys	Lys	Asn	Ile	Gly	Val	Asp	Asp	Val	Gly	Lys
	690					695					700				
Asp	Ile	Gly	Pro	Asp	Thr	Thr	Ser	Ile	Asn	Arg	Val	Ala	Asp	Thr	Leu
705					710					715					720
Asn	Asn	Trp	Ser	Ile	His	Pro	Asp	Pro	Lys	Gly	Glu	Pro	Ser	Glu	Glu
				725					730					735	
Lys	Asn	Ala	Met	Ala	Lys	Thr	Phe	Tyr	Asp	Ser	Ser	Phe	Pro	Thr	Glu
			740					745					750		

His Val Lys Thr Lys Pro Leu Ile Ser Thr Pro Leu Gln Ser His Leu 760 755 765 Gln Ala Ile Lys Thr Thr Lys Asn Thr Ser Gly Asp Asp Asp Trp Gln 775 780 770 Ser Leu Ile Thr Asn Gln Leu Asn Lys Ser Glu Asn Leu Leu Ser Leu 795 785 790 800 Glu Asn Asp Asn Gln Pro Lys Lys Arg Lys Ala Glu Glu Thr Leu Glu 805 810 815 Lys Asn Asn Arg Leu Lys 820

<210> 3383 <211> 632

<212> PRT

<213> Homo sapiens

<400> 3383

Met Thr Pro Pro Val Leu Thr Thr Ala Glu Thr Ser Val Lys Pro Ser

1 5 10 15

Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr Gly Ile Ser

20 25 30

Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr Asp Val Ile 35 40 45

Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser Thr Ile Ala
50 55 60

Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr Thr Arg
65 70 75 80

Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu Ser Ser Ser

	85	90		95
Ala Thr Leu Met	Pro Val Pro	Ile Ser Pro	Pro Phe Thr G	ln Arg Ala
100		105	1	10
Val Thr Asp Asn	Val Ala Thr	Pro Ile Ser	Gly Leu Met T	hr Asn Thr
115		120	125	
Val Val Lys Leu	His Glu Ser	Ser Arg His	Asn Ala Lys P	ro Gln Gln
130	135		140	
Leu Val Ala Glu	Val Ala Thr	Ser Pro Lys	Val His Pro A	sn Ala Lys
145	150		155	160
Phe Thr Ile Gly	Thr Thr His	Phe Ile Tyr	Ser Asn Leu L	eu His Ser
	165	170		175
Thr Pro Met Pro	Ala Leu Thr	Thr Val Lys	Ser Gln Asn S	er Lys Leu
180		185	1	90
Thr Pro Ser Pro	Trp Ala Glu	Asn Gln Phe	Trp His Lys P	ro Tyr Ser
195		200	205	
Glu Ile Ala Glu	Lys Gly Lys	Lys Pro Glu	Val Ser Met L	eu Ala Thr
210	215		220	
Thr Gly Leu Ser	Glu Ala Thr	Thr Leu Val	Ser Asp Trp A	sp Gly Gln
225	230		235	240
Lys Asn Thr Lys	Lys Ser Asp	Phe Asp Lys	Lys Pro Val G	ln Glu Ala
	245	250		255
Thr Thr Ser Lys	Leu Leu Pro	Phe Asp Ser	Leu Ser Arg T	yr Ile Phe
260		265	2	70
Glu Lys Pro Arg	Ile Val Gly	Gly Lys Ala	Ala Ser Phe T	hr Ile Pro
275		280	285	
Ala Asn Ser Asp	Ala Phe Leu	Pro Cys Glu	Ala Val Gly A	sn Pro Leu
290	295		300	
Pro Thr Ile His	Trp Thr Arg	Val Pro Ser	Gly Leu Asp L	eu Ser Lys
305	310		315	320

Arg	Lys	Gln	Asn	Ser	Arg	Val	Gln	Val	Leu	Pro	Asn	Gly	Thr	Leu	Ser
				325					330					335	
Ile	Gln	Arg	Val	Glu	Ile	Gln	Asp	Arg	Gly	Gln	Tyr	Leu	Cys	Ser	Ala
			340					345					350		
Ser	Asn	Leu	Phe	Gly	Thr	Asp	His	Leu	His	Val	Thr	Leu	Ser	Val	Val
		355					360					365			
Ser	Tyr	Pro	Pro	Arg	Ile	Leu	Glu	Arg	Arg	Thr	Lys	Glu	Ile	Thr	Val
	370					375					380				
His	Ser	Gly	Ser	Thr	Val	Glu	Leu	Lys	Cys	Arg	Ala	Glu	Gly	Arg	Pro
385					390					395					400
Ser	Pro	Thr	Val	Thr	Trp	Ile	Leu	Ala	Asn	Gln	Thr	Val	Val	Ser	Glu
				405					410					415	
Ser	Ser	Gln	Gly	Ser	Arg	Gln	Ala	Val	Val	Thr	Val	Asp	Gly	Thr	Leu
			420					425					430		
Val	Leu	His	Asn	Leu	Ser	Ile	Tyr	Asp	Arg	Gly	Phe	Tyr	Lys	Cys	Val
		435					440					445			
Ala	Ser	Asn	Pro	Gly	Gly	Gln	Asp	Ser	Leu	Leu	Val	Lys	Ile	Gln	Val
	450					455					460				
Ile	Ala	Ala	Pro	Pro	Val	Ile	Leu	Glu	Gln	Arg	Arg	Gln	Val	Ile	Val
465					470					475					480
Gly	Thr	Trp	Gly	Glu	Ser	Leu	Lys	Leu	Pro	Cys	Thr	Ala	Lys	Gly	Thr
				485					490					495	
Pro	Gln	Pro	Ser	Val	Tyr	Trp	Val	Leu	Ser	Asp	Gly	Thr	Glu	Val	Lys
			500					505					510		
Pro	Leu	Gln	Phe	Thr	Asn	Ser	Lys	Leu	Phe	Leu	Phe	Ser	Asn	Gly	Thr
		515					520					525			
Leu	Tyr	Ile	Arg	Asn	Leu	Ala	Ser	Ser	Asp	Arg	Gly	Thr	Tyr	Glu	Cys
	530					535					540				
Ile	Ala	Thr	Ser	Ser	Thr	Gly	Ser	Glu	Arg	Arg	Val	Val	Met	Leu	Thr

Met Glu Glu Arg Val Thr Ser Pro Arg Ile Glu Ala Ala Ser Gln Lys Arg Thr Glu Val Asn Phe Gly Asp Lys Leu Leu Leu Asn Cys Ser Ala Thr Gly Glu Pro Lys Pro Gln Ile Met Trp Arg Leu Pro Ser Lys Ala Val Val Asp Gln Gln His Arg Val Ala Ala Gly Ser Thr Ser Thr Leu Met Asp Pro Cys Leu Leu Asp Gln

<210> 3384

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3384

Met Asn Val Ala Phe Ile Tyr Cys Lys Ile Lys Asp Gly Asp Gly Gln Gly Val Thr Ala Ser Leu Phe Leu Ala Leu Ile Ile Phe Leu Asp Ile Lys Ser His His Leu Phe Pro Thr Lys Lys Glu Arg Gln Asp His Gln Thr Leu Gln Gly Ser Gln Glu Glu Glu Gly Lys Glu Pro Arg Asn Gly Glu Lys Leu Asp Ser Arg Asp Gly Ser Gly Asp Ala Pro Gln Ser Ala Ala Val Glu Asn Ala Glu Glu Glu Leu Ala Ser Gly Thr Phe Pro Leu 85 90 95

Arg Ser Met Ala Gly Gly Met Ser Asn Ile His
100 105

<210> 3385

<211> 656

<212> PRT

<213> Homo sapiens

<400> 3385

Met Tyr Pro Glu Leu Gln Ile Thr Asn Val Met Glu Ala Asn Gln Arg

1 5 10 15

Val Ser Ile Asp Asn Trp Cys Arg Arg Asp Lys Lys Gln Cys Lys Ser
20 25 30

Arg Phe Val Thr Pro Phe Lys Cys Leu Val Gly Glu Phe Val Ser Asp 35 40 45

Val Leu Leu Val Pro Glu Lys Cys Gln Phe Phe His Lys Glu Arg Met
50 55 60

Glu Val Cys Glu Asn His Gln His Trp His Thr Val Val Lys Glu Ala 65 70 75 80

Cys Leu Thr Gln Gly Met Thr Leu Tyr Ser Tyr Gly Met Leu Leu Pro
85 90 95

Cys Gly Val Asp Gln Phe His Gly Thr Glu Tyr Val Cys Cys Pro Gln
100 105 110

Thr Lys Ile Ile Gly Ser Val Ser Lys Glu Glu Glu Glu Glu Asp Glu
115 120 125

Glu Glu Glu Glu Asp Glu Glu Glu Asp Tyr Asp Val Tyr Lys Ser Glu

	130					135					140				
Phe	Pro	Thr	Glu	Ala	Asp	Leu	Glu	Asp	Phe	Thr	Glu	Ala	Ala	Val	Asp
145					150					155					160
Glu	Asp	Asp	Glu	Asp	Glu	Glu	Glu	Gly	Glu	Glu	Val	Val	Glu	Asp	Arg
				165					170					175	
Asp	Tyr	Tyr	Tyr	Asp	Thr	Phe	Lys	Gly	Asp	Asp	Tyr	Asn	Glu	Glu	Asn
			180					185					190		
Pro	Thr	Glu	Pro	Gly	Ser	Asp	Gly	Thr	Met	Ser	Asp	Lys	Glu	Ile	Thr
		195					200					205			
His	Asp	Val	Lys	Ala	Val	Cys	Ser	Gln	Glu	Ala	Met	Thr	Gly	Pro	Cys
	210					215					220				
Arg	Ala	Val	Met	Pro	Arg	Trp	Tyr	Phe	Asp	Leu	Ser	Lys	Gly	Lys	Cys
225					230					235					240
Val	Arg	Phe	Ile	Tyr	Gly	Gly	Cys	Gly	Gly	Asn	Arg	Asn	Asn	Phe	Glu
•				245					250					255	
Ser	Glu	Asp	Tyr	Cys	Met	Ala	Val	Cys	Lys	Ala	Met	Ile	Pro	Pro	Thr
			260					265					270		
Pro	Leu	Pro	Thr	Asn	Asp	Val	Asp	Val	Tyr	Phe	Glu	Thr	Ser	Ala	Asp
		275					280					285			
Asp	Asn	Glu	His	Ala	Arg	Phe	Gln	Lys	Ala	Lys	Glu	Gln	Leu	Glu	Ile
	290					295					300				
Arg	His	Arg	Asn	Arg	Met	Asp	Arg	Val	Lys	Lys	Glu	Trp	Glu	Glu	Ala
305					310					315					320
Glu	Leu	Gln	Ala	Lys	Asn	Leu	Pro	Lys	Ala	Glu	Arg	Gln	Thr	Leu	Ile
				325					330					335	
Gln	His	Phe	Gln	Ala	Met	Val	Lys	Ala	Leu	Glu	Lys	Glu	Ala	Ala	Ser
			340					345					350		
Glu	Lys		Gln	Leu	Val	Glu		His	Leu	Ala	Arg		Glu	Ala	Met
		355					360					365			

Leu	Asn	Asp	Arg	Arg	Arg	Met	Ala	Leu	Glu	Asn	Tyr	Leu	Ala	Ala	Leu
	370					375					380				
Gln	Ser	Asp	Pro	Pro	Arg	Pro	His	Arg	Ile	Leu	Gln	Ala	Leu	Arg	Arg
385					390					395					400
Tyr	Val	Arg	Ala	Glu	Asn	Lys	Asp	Arg	Leu	His	Thr	Ile	Arg	His	Tyr
				405					410					415	
Gln	His	Val	Leu	Ala	Val	Asp	Pro	Glu	Lys	Ala	Ala	Gln	Met	Lys	Ser
			420					425					430		
Gln	Val	Met	Thr	His	Leu	His	Val	Ile	Glu	Glu	Arg	Arg	Asn	Gln	Ser
		435					440					445			
Leu	Ser	Leu	Leu	Tyr	Lys	Val	Pro	Tyr	Val	Ala	Gln	Glu	Ile	Gln	Glu
	450					455					460				
Glu	Ile	Asp	Glu	Leu	Leu	Gln	Glu	Gln	Arg	Ala	Asp	Met	Asp	Gln	Phe
465					470					475					480
Thr	Ala	Ser	Ile	Ser	Glu	Thr	Pro	Val	Asp	Val	Arg	Val	Ser	Ser	Glu
				485					490					495	
Glu	Ser	Glu	Glu	Ile	Pro	Pro	Phe	His	Pro	Phe	His	Pro	Phe	Pro	Ala
			500					505					510		
Leu	Pro	Glu	Asn	Glu	Gly	Ser	Gly	Val	Gly	Glu	Gln	Asp	Gly	Gly	Leu
		515					520					525			
Ile	Gly	Ala	Glu	Glu	Lys	Val	Ile	Asn	Ser	Lys	Asn	Lys	Val	Asp	Glu
	530					535					540				
Asn	Met	Val	Ile	Asp	Glu	Thr	Leu	Asp	Val	Lys	Glu	Met	Ile	Phe	Asn
545					550					555					560
Ala	Glu	Arg	Val	Gly	Gly	Leu	Glu	Glu	Glu	Arg	Glu	Ser	Val	Gly	Pro
				565					570					575	
Leu	Arg	Glu	Asp	Phe	Ser	Leu	Ser	Ser	Ser	Ala	Leu	Ile	Gly	Leu	Leu
			580					585					590		
Val	Tle	Ala	Val	Ala	He	Ala	Thr	Val	He	Val	He	Ser	Leu	Val	Met

600 605 595 Leu Arg Lys Arg Gln Tyr Gly Thr Ile Ser His Gly Ile Val Glu Val 610 620 615 Asp Pro Met Leu Thr Pro Glu Glu Arg His Leu Asn Lys Met Gln Asn 630 625 635 640 His Gly Tyr Glu Asn Pro Thr Tyr Lys Tyr Leu Glu Gln Met Gln Ile 650 655 645

<210> 3386

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3386

Met Asp Thr Trp Leu Glu Ala Phe Pro Ile Ile Ser Gly Arg Asp Glu

1 5 10 15

Leu Tyr Gln Asp Arg Lys Arg Pro Gly Phe Met Leu Pro Asn Ser Tyr

20 25 30

Met Phe Thr Val Leu Gly Ser Asn Arg Pro Met Thr Thr Val Leu Cys

35 40 45

Thr Ser Gln Ile Tyr Leu Thr Gly Phe His Leu Leu Cys Val Pro Gln 50 55 60

Ala Leu Ser Thr Val Met Arg His Ser Lys Pro Leu Met Ser Glu Arg
65 70 75 80

Ile Arg Glu Asn Ile Lys Asp Asp Ile Ala Glu Val Thr Ala Pro Gln 85 90 95

Arg Tyr Leu Arg Trp Lys Ile Gly Gly Cys Trp Cys Leu Arg Gly Ser
100 105 110

Lys Glu

<210> 3387

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3387

Met Ser Ser Tyr Ser His Ser Leu Arg Phe Trp Met Asn Ile Leu Glu

1 5 10 15

Thr Ile Gln Pro Thr Ala Leu Pro Ser Cys Gly Tyr Ile Tyr Ile Tyr

20 25 30

Thr Tyr Thr Tyr Leu Phe Phe Ser Asp Arg Val Ser Arg Cys Cys Pro

35 40 45

Gly Trp Arg Ala Val Ala Leu His Arg His Ser His Arg Val Leu Gln

50 55 60

Leu Pro Thr Pro Gly Leu Glu Pro Ser Ser Phe Val Ser Pro Met Ser

65 70 75 80

Thr Gly Glu His Arg Cys Gly Ala Leu Cys Pro Ala Val Val Thr Asp

85 90 95

Gly Ala Pro Asp Thr Gly Leu

100

<210> 3388

<211> 580

<212> PRT

<213> Homo sapiens

<400> 3388

Met Met Leu Gly Asp Ala Lys Ile Gly Asn Asn Ser Val Ser Ser Leu

1 5 10 15

Lys Asn Asp Asp Phe Thr Met Arg Gly Leu Gln Cys Asp Gly Asn Ala
20 25 30

Asp Asp Ile Trp Thr Ala Ser Gln Asn Pro Lys Ser Cys Gly Lys Ser
35 40 45

Ile Ser Ile Glu Thr Ala Asn Leu Arg Glu Tyr Ala Arg Tyr Val Leu 50 55 60

Arg Thr Ile Cys Gln Gln Glu Trp Val Gly Glu His Cys Leu Lys Glu
65 70 75 80

Pro Glu Arg Leu Cys Thr Asp Lys Glu Leu Ile Leu Asp Pro Val Leu 85 90 95

Ser Asn Met Gln Ala Gln Lys Leu Leu Gln Leu Ile Cys Tyr Pro His

100 105 110

Gly Ile Lys Glu Cys Thr Glu Gly Asp Asn Leu Gln Arg Gln His Ile 115 120 125

Lys Arg Ile Leu Gln Asn Leu Glu Gln Trp Thr Leu Arg Gln Ser Trp
130 135 140

Leu Glu Leu Gln Leu Met IIe Lys Gln Cys Leu Lys Asp Pro Gly Ser 145 150 155 160

Gly Ser Val Ala Glu Met Asn Asn Leu Leu Asp Asn Ile Ala Lys Ala 165 170 175

Thr Ile Glu Val Phe Gln Gln Ser Ala Asp Leu Asn Asn Ser Ser Asn 180 185 190

Ser Gly Met Ser Leu Phe Asn Pro Asn Ser Ile Gly Ser Ala Asp Thr
195 200 205

Ser	Ser	Thr	Arg	Gln	Asn	Gly	Ile	Lys	Thr	Phe	Leu	Ser	Ser	Ser	Glu
	210					215					220				
Arg	Arg	Gly	Val	Trp	Leu	Val	Ala	Pro	Leu	Ile	Ala	Arg	Leu	Pro	Thr
225					230					235					240
Ser	Val	Gln	Gly	Arg	Val	Leu	Lys	Ala	Ala	Gly	Glu	Glu	Leu	Glu	Lys
				245					250	•				255	
Gly	Gln	His	Leu	Gly	Ser	Ser	Ser	Lys	Lys	Glu	Arg	Asp	Arg	Gln	Lys
			260					265					270		
Gln	Lys	Ser	Met	Ser	Leu	Leu	Ser	Gln	Gln	Pro	Phe	Leu	Ser	Leu	Val
		275					280					285			
Leu	Thr	Cys	Leu	Lys	Gly	Gln	Asp	Glu	Gln	Arg	Glu	Gly	Leu	Leu	Thr
	290					295					300				
Ser	Leu	Gln	Asn	Gln	Val	Asn	Gln	Ile	Leu	Ser	Asn	Trp	Arg	Glu	Glu
305					310					315					320
Arg	Tyr	Gln	Asp	Asp	Ile	Lys	Ala	Arg	Gln	Met	Met	His	Glu	Ala	Leu
				325					330					335	
Gln	Leu	Arg	Leu	Asn	Leu	Val	Gly	Gly	Met	Phe	Asp	Thr	Val	Gln	Arg
			340					345					350		
Ser	Thr	Gln	Trp	Thr	Thr	Asp	Trp	Ala	Leu	Leu	Leu	Leu	Gln	Ile	Ile
		355					360					365			
Thr	Ser	Gly	Thr	Val	Asp	Met	His	Thr	Asn	Asn	Glu	Leu	Phe	Thr	Thr
	370					375					380				
Val	Leu	Asp	Met	Leu	Gly	Val	Leu	Ile	Asn	Gly	Thr	Leu	Ala	Ser	Asp
385					390					395					400
Leu	Ser	Asn	Ala	Ser	Pro	Gly	Gly	Ser	Glu	Glu	Asn	Lys	Arg	Ala	Tyr
				405					410					415	
Met	Asn	Leu	Val	Lys	Lys	Leu	Lys	Lys	Glu	Leu	Gly	Asp	Lys	Arg	Ser
			420					425					430		
Glu	Ser	Ile	Asp	Lys	Val	Arg	Gln	Leu	Leu	Pro	Leu	Pro	Lys	Gln	Thr

Cys Asp Val Ile Thr Cys Glu Pro Met Gly Ser Leu Ile Asp Thr Lys Gly Asn Lys Ile Ala Gly Phe Asp Ser Ile Asp Lys Lys Gln Gly Leu Gln Val Ser Thr Lys Gln Lys Val Ser Pro Trp Asp Leu Phe Glu Gly Gln Lys Asn Pro Ala Pro Leu Ser Trp Ala Trp Phe Gly Thr Val Arg Val Asp Arg Arg Val Ile Lys Tyr Glu Glu Gln His His Leu Leu Leu Tyr His Thr His Pro Met Pro Lys Pro Arg Ser Tyr Tyr Leu Gln Pro Leu Pro Leu Pro Pro Glu Glu Glu Glu Glu Glu Pro Thr Ser Pro Val Ser Gln Glu Pro Glu Arg Lys Ser Ala Glu Leu Ser Asp Gln Gly Lys Thr Thr Thr Asp

<210> 3389

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3389

Met Pro Leu Ser Pro Pro Pro Ala Gly Gly Ala Trp Ala Tyr Leu Lys

1 5 10 15

Thr Leu Gly Glu Val Phe Thr Phe Leu Ala Leu Lys Lys Arg Lys Lys Arg Gln Leu Ala Ala Glu Ala Val Pro Gly Leu Pro Ala Thr Ser Gln Asn Leu His Arg Val Pro Leu Gly Pro Gln Ser Gly Pro Glu Ala Leu Gly Arg Gly Thr Arg Arg Ser Ser Ala Leu Thr Ala Pro Ala Leu Phe Gly Phe Ser Ser Pro Arg Ala Trp Pro Glu Phe Arg Ser Pro Gly Phe Trp Ser Ala Arg <210> 3390 <211> 753

<212> PRT <213> Homo sapiens

<400> 3390

Met Asp Pro Asp Pro Gln Ala Gly Val Gln Val Gly Met Arg Val Val Arg Gly Val Asp Trp Lys Trp Gly Gln Gln Asp Gly Gly Gly Gly Val Gly Thr Val Val Glu Leu Gly Arg His Gly Ser Pro Ser Thr Pro Asp Arg Thr Val Val Val Gln Trp Asp Gln Gly Thr Arg Thr Asn Tyr Arg Ala Gly Tyr Gln Gly Ala His Asp Leu Leu Tyr Asp Asn Ala

65					70					75					80
Gln	Ile	Gly	Val	Arg	His	Pro	Asn	Ile	Ile	Cys	Asp	Cys	Cys	Lys	Lys
				85					90					95	
His	Gly	Leu	Arg	Gly	Met	Arg	Trp	Lys	Cys	Arg	Val	Cys	Leu	Asp	Tyr
			100					105					110		
Asp	Leu	Cys	Thr	Gln	Cys	Tyr	Met	His	Asn	Lys	His	Glu	Leu	Ala	His
		115					120					125			
Ala	Phe	Asp	Arg	Tyr	Glu	Thr	Ala	His	Ser	Arg	Pro	Val	Thr	Leu	Ser
	130		÷			135					140				
Pro	Arg	Gln	Gly	Leu	Pro	Arg	Ile	Pro	Leu	Arg	Gly	Ile	Phe	Gln	Gly
145					150					155					160
Ala	Lys	Val	Val	Arg	Gly	Pro	Asp	Trp	Glu	Trp	Gly	Ser	Gln	Asp	Gly
				165					170					175	
Lys	Pro	Ala	Glu	Leu	Gln	Arg	Arg	Val	Ser	Ala	Asp	Ser	Gln	Pro	Phe
			180					185					190		
Gln	His	Gly	Asp	Lys	Val	Lys	Cys	Leu	Leu	Asp	Thr	Asp	Val	Leu	Arg
		195					200					205			
Glu	Met	Gln	Glu	Gly	His	Gly	Gly	Trp	Asn	Pro	Arg	Met	Ala	Glu	Phe
	210					215					220				
Ile	Gly	Gln	Thr	Gly	Thr	Val	His	Arg	Ile	Thr	Asp	Arg	Gly	Asp	Val
225					230					235					240
Arg	Val	Gln	Phe	Asn	His	Glu	Thr	Arg	Trp	Thr	Phe	His	Pro	Gly	Ala
				245					250					255	
Leu	Thr	Lys	His	His	Ser	Phe	Trp	Val	Gly	Asp	Val	Val	Arg	Val	Ile
			260					265					270		
Gly	Asp	Leu	Asp	Thr	Val	Lys	Arg	Leu	Gln	Ala	Gly	His	Gly	Glu	Trp
		275					280		,			285			
Thr	Asp	Asp	Met	Ala	Pro	Ala	Leu	Gly	Arg	Val	Gly	Lys	Val	Val	Lys
	290					295					300				

Val	Phe	Gly	Asp	Gly	Asn	Leu	Arg	Val	Ala	Val	Ala	Gly	Gln	Arg	Trp
305					310					315					320
Thr	Phe	Ser	Pro	Ser	Cys	Leu	Val	Ala	Tyr	Arg	Pro	Glu	Glu	Asp	Ala
				325					330					335	
Asn	Leu	Asp	Val	Ala	Glu	Arg	Ala	Arg	Glu	Asn	Lys	Ser	Ser	Leu	Ser
			340					345					350		
Val	Ala	Leu	Asp	Lys	Leu	Arg	Ala	Gln	Lys	Ser	Asp	Pro	Glu	His	Pro
		355					360					365			
Gly	Arg	Leu	Val	Val	Glu	Val	Ala	Leu	Gly	Asn	Ala	Ala	Arg	Ala	Leu
	370					375					380				
Asp	Leu	Leu	Arg	Arg	Arg	Pro	Glu	Gln	Val	Asp	Thr	Lys	Asn	Gln	Gly
385					390					395			-		400
Arg	Thr	Ala	Leu	Gln	Val	Ala	Ala	Tyr	Leu	Gly	Gln	Val	Glu	Leu	Ile
				405					410					415	
Arg	Leu	Leu	Leu	Gln	Ala	Arg	Ala	Gly	Val	Asp	Leu	Pro	Asp	Asp	Glu
			420					425					430		
Gly	Asn	Thr	Ala	Leu	His	Tyr	Ala	Ala	Leu	Gly	Asn	Gln	Pro	Glu	Ala
		435					440					445			
Thr	Arg	Val	Leu	Leu	Ser	Ala	Gly	Cys	Arg	Ala	Asp	Ala	Ile	Asn	Ser
	450					455					460				
Thr	Gln	Ser	Thr	Ala	Leu	His	Val	Ala	Val	Gln	Arg	Gly	Phe	Leu	Glu
465					470					475					480
Val	Val	Arg	Ala	Leu	Cys	Glu	Arg	Gly	Cys	Asp	Val	Asn	Leu	Pro	Asp
				485					490					495	
Ala	His	Ser	Asp	Thr	Pro	Leu	His	Ser	Ala	Ile	Ser	Ala	Gly	Thr	Gly
			500					505					510		
Ala	Ser	Gly	Ile	Val	Glu	Val	Leu	Thr	Glu	Val	Pro	Asn	Ile	Asp	Val
		515					520					525			
Thr	Ala	Thr	Asn	Ser	Gln	Glv	Phe	Thr	Leu	Leu	His	His	Ala	Ser	Leu

	530					535					540				
Lys	Gly	His	Ala	Leu	Ala	Val	Arg	Lys	Ile	Leu	Ala	Arg	Ala	Arg	Gln
545					550					555					560
Leu	Val	Asp	Ala	Lys	Lys	Glu	Asp	Gly	Р̀hе	Thr	Ala	Leu	His	Leu	Ala
				565					570					575	
Ala	Leu	Asn	Asn	His	Arg	Glu	Val	Ala	Gln	Ile	Leu	Ile	Arg	Glu	Gly
			580					585					590		
Arg	Cys	Asp	Val	Asn	Val	Arg	Asn	Arg	Lys	Leu	Gln	Ser	Pro	Leu	His
		595					600					605			
Leu	Ala	Val	Gln	Gln	Ala	His	Val	Gly	Leu	Val	Pro	Leu	Leu	Val	Asp
	610					615					620				
Ala	Gly	Cys	Ser	Val	Asn	Ala	Glu	Asp	Glu	Glu	Gly	Asp	Thr	Ala	Leu
625					630					635					640
His	Val	Ala	Leu	Gln	Arg	His	Gln	Leu	Leu	Pro	Leu	Val	Ala	Asp	Gly
				645					650					655	
Ala	Gly	Gly	Asp	Pro	Gly	Pro	Leu	Gln	Leu	Leu	Ser	Arg	Leu	Gln	Ala
			660					665					670		
Ser	Gly	Leu	Pro	Gly	Ser	Ala	Glu	Leu	Thr	Val	Gly	Ala	Ala	Val	Ala
		675					680					685			
Cys	Phe	Leu	Ala	Leu	Glu	Gly	Ala	Asp	Val	Ser	Tyr	Thr	Asn	His	Arg
	690					695					700				
Gly	Arg	Ser	Pro	Leu	Asp	Leu	Ala	Ala	Glu	Gly	Arg	Val	Leu	Lys	Ala
705					710					715					720
Leu	Gln	Gly	Cys	Ala	Gln	Arg	Phe	Arg	Val	Arg	Ala	Gln	Asp	Glu	Glu
				725					730					735	
Val	His	Gln	Val	Pro	Gly	Gly	Arg	Gln	Gln	Glu	Thr	Ala	Pro	Arg	Arg
			740					745					750		
Leu															

<210> 3391 <211> 640 <212> PRT <213> Homo sapiens <400> 3391 Met Glu Ala Thr Glu Pro Gln Asp Met Val Val Tyr Asp Gln Ser Thr Arg Asp Ala Ser Val Leu Ala Ala Asp Arg Phe Leu Ser Ile Leu Leu Ser Lys Leu Asp Ser Cys Phe Asp Ser Val Ala Ile Leu Thr Gly Gly Phe Ala Thr Phe Ser Ser Cys Phe Pro Ser Leu Cys Gln Gly Lys Pro Ala Ala Leu Leu Pro Met Ser Leu Ser Gln Pro Cys Leu Pro Val Pro Ser Val Ser Leu Thr Leu Ile Leu Pro His Leu Tyr Leu Gly Ser Gln Lys Asp Val Leu Asn Lys Asp Leu Thr Thr Gln Asn Gly Ile Ser Tyr Val Leu Asn Ala Ser Asn Ser Thr Phe Glu Ala Cys Asp Pro Gln Arg Thr Gly Thr Val Ala Val Ala Gln Val Leu Ala Tyr Leu Glu Ala Val Thr Gly Gln Gly Pro Gln Asp Ala Arg Leu Gln Thr Leu Ala Asn Ser

Leu Asp Pro Asn Gly Glu Gly Pro Lys Ala Thr Val Asp Leu Asp Thr

				165					170					175	
Phe	Leu	Val	Val	Met	Arg	Asp	Trp	Ile	Ala	Ala	Cys	Gln	Leu	His	Gly
			180					185					190		
Gly	Leu	Glu	Leu	Glu	Glu	Glu	Thr	Ala	Phe	Gln	Gly	Ala	Leu	Thr	Ser
		195					200					205			
Gln	Gln	Leu	Pro	Ser	Gly	Cys	Pro	Glu	Ala	Glu	Glu	Pro	Ala	Asn	Leu
	210					215					220				
Glu	Ser	Phe	Gly	Gly	Glu	Asp	Pro	Arg	Pro	Glu	Leu	Gln	Ala	Thr	Ala
225					230					235					240
Asp	Leu	Leu	Ser	Ser	Leu	Glu	Asp	Leu	Glu	Leu	Ser	Asn	Arg	Arg	Leu
				245					250					255	
Val	Gly	Glu	Asn	Ala	Lys	Leu	Gln	Arg	Ser	Met	Glu	Thr	Ala	Glu	Glu
			260					265					270		
Gly	Ser	Ala	Arg	Leu	Gly	Glu	Glu	Ile	Leu	Ala	Leu	Arg	Lys	Gln	Leu
		275					280					285			
His	Ser	Thr	Gln	Gln	Ala	Leu	Gln	Phe	Ala	Lys	Ala	Met	Asp	Glu	Glu
	290					295					300				
Leu	Glu	Asp	Leu	Lys	Thr	Leu	Ala	Arg	Ser	Leu	Glu	Glu	Gln	Asn	Arg
305					310					315					320
Ser	Leu	Leu	Ala	Gln	Ala	Arg	Gln	Ala	Glu	Lys	Glu	Gln	Gln	His	Leu
				325					330					335	
Val	Ala	Glu	Met	Glu	Thr	Leu	Gln	Glu	Glu	Asn	Gly	Lys	Leu	Leu	Ala
			340					345					350		
Glu	Arg	Asp	Gly	Val	Lys	Lys	Arg	Ser	Gln	Glu	Leu	Ala	Met	Glu	Lys
		355					360					365			
Asp	Thr	Leu	Lys	Arg	Gln	Leu	Phe	Glu	Cys	Glu	His	Leu	Ile	Cys	Glr
	370			٠		375					380				
Arg	Asp	Thr	Ile	Leu	Ser	Glu	Arg	Thr	Arg	Asp	Val	Glu	Ser	Leu	Ala
385					390					395					400

Gln	Thr	Leu	Glu	Glu	Tyr	Arg	Val	Thr	Thr	Gln	Glu	Leu	Arg	Leu	Glu
				405					410					415	
Ile	Ser	Arg	Leu	Glu	Glu	Gln	Leu	Ser	Gln	Thr	Tyr	Glu	Gly	Pro	Asp
			420					425					430		
Glu	Leu	Pro	Glu	Gly	Ala	Gln	Leu	Arg	Arg	Val	Gly	Trp	Thr	Glu	Leu
		435					440					445			
Leu	Pro	Pro	Ser	Leu	Gly	Leu	Glu	Ile	Glu	Ala	Ile	Arg	Gln	Glu	Val
	450					455					460				
Ala	Thr	Ala	Asp	Leu	Ser	Asn	Pro	Leu	Cys	Gly	Val	Trp	Gln	Trp	Glu
465					470					475					480
Glu	Val	Ile	His	Glu	Thr	Ser	Glu	Glu	Thr	Glu	Phe	Pro	Ser	Glu	Ala
				485					490					495	
Pro	Ala	Gly	Gly	Gln	Arg	Asn	Phe	Gln	Gly	Glu	Pro	Ala	His	Pro	Glu
			500					505					510		
Glu	Gly	Arg	Lys	Glu	Pro	Ser	Met	Trp	Leu	Thr	Arg	Arg	Glu	Glu	Glu
		515					520					525			
Glu	Asp	Ala	Glu	Ser	Gln	Val	Thr	Ala	Asp	Leu	Pro	Val	Pro	Leu	Gly
	530					535					540				
Ala	Pro	Arg	Pro	Gly	Asp	Ile	Pro	Glu	Asn	Pro	Pro	Glu	Arg	Pro	Ala
545					550					555					560
Arg	Arg	Glu	Leu	Gln	Gln	Ala	Leu	Val	Pro	Val	Met	Lys	Lys	Leu	Val
				565					570					575	
Pro	Val	Arg	Arg	Arg	Ala	Trp	Gly	Gln	Leu	Cys	Leu	Pro	Pro	Gln	Arg
			580					585					590		
Leu	Arg		Thr	Arg	His	Pro		Ile	Pro	Ala	Pro		Leu	Gly	Leu
		595					600					605	_		
Leu		Leu	Leu	Leu	Leu		Val	Leu	Leu	Leu		Pro	Ser	Pro	Pro
	610					615					620				
Pro	Thr	Trp	Pro	His	Leu	Gln	Leu	Cys	Tyr	Leu	Gln	Pro	Pro	Pro	Val

625 630 635 640

<210> 3392

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3392

1

Met Pro Met Glu Asn Pro Lys Lys Ser Arg Asn Ser Tyr Thr Tyr Ile

5 10 15

Arg Gln Ser Arg Val Gln Asp Lys Asn Gly Lys Asn Arg Gln Arg Arg

20 25 30

Ser Leu Cys Asn Asp Thr Gly Val Asn Ser Ala Arg Gly Tyr Asn Asp

35 40 45

Cys Lys Tyr Arg Tyr Thr Gln His Trp Asn Ile Gln Ile Tyr Lys Thr

50 55 60

Asn Ile Ile Arg Ala Lys Lys Arg Asn Arg Ala Gln Tyr Asn Asn Ser

65 70 75 80

Trp Arg Leu Gln His Leu Ala Phe Ser Thr Gly Gln Ile Ser Gln Thr

85 90 95

Glu Asn Gln Gln Ile Leu Asp Ile Ile Cys Thr Ile Glu Gln Ile Asp

100 105 110

Ile Tyr Arg Ile

115

<210> 3393

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3393

Met His His Tyr Ala Gln Leu Ile Phe Leu Phe Leu Val Glu Met Gly

1 5 10 15

Phe Leu His Val Gly Gln Ala Ser Leu Glu Leu Pro Thr Ser Gly Asp

20 25 30

Gln Pro Ala Pro Ala Pro Gln Gly Ser Gly Ile Thr Gly Val Ser His

35 40 45

His Ala Gln Val Phe Phe Phe Phe Leu Asp Gly Val Ser Leu Leu

50 55 60

Leu Pro Arg Leu Glu Cys Ser Gly Thr Ile Leu Thr His Arg Asn Leu

65 70 75 80

Gln Pro Leu Pro Pro Gly Phe Lys Gln Leu Ser Cys Leu Ser Leu Pro

85 90 95

Ser Ser Trp Asp Tyr Arg Arg Ala Leu Pro His Leu Ala Ile Phe Phe

100 105 110

Phe Phe Phe Lys Val Ala Thr Glu Phe Leu His Val Gly

115 120 125

<210> 3394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 3394

Met Ile Thr Phe Ala Tyr Trp Glu Gln Cys Ile Cys Glu Glu Thr Leu

Arg Pro Ser Arg Asp His Pro Pro His His Pro Leu Gln Pro Arg Ser Trp Phe Cys Pro Pro Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu Asp Thr Ser Thr Ile Pro Ala Glu Glu Leu Thr Met Ser Pro Ser Arg Ser Val Ala Asn Ser Gly Leu Ser Asp Ser Leu Thr Thr Ser Thr Pro Arg Pro Ser Asn Gly Asp Ser Pro Ser His Pro Tyr His Arg Thr Phe Ser Pro His Phe His His Phe Val Glu Gln Cys Leu Gln Arg Asn Pro Asp Ala Arg Tyr Pro Cys Trp Pro Gly Pro Gly Leu Arg Glu Ser Arg Gly Cys Ser Gly Gly <210> 3395 <211> 113 <212> PRT

<213> Homo sapiens

Gln Ala Gln Val Met Pro Ser Thr Gly Cys Cys Trp Trp Pro Arg Leu 40 45 35 Cys Leu Ala Ser Glu Val Gly Ala Val Gly Cys Ala Ser Ser Arg Thr 50 55 60 Glu Val Ser Gly Asp Thr Gly Pro Gly Gln Lys His Ile Gln Thr His 70 75 80 65 Ser Cys Phe Ser Asn Glu Thr His Ser Gln Pro Gly Ser Lys Gln Ile 90 95 85 Thr Gly Cys Thr Leu Leu Ala Leu Gly Asn Met Asn Val Ser Arg His 100 105 110 Tyr

<210> 3396

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3396

Met Ile Glu Glu Thr Ser Phe Gly Lys Ser Tyr Ala Gln Leu Asn Phe
1 5 10 15

Glu Asn Ser Met Leu Trp Met Asp Leu Pro Asp Glu Glu Pro Asp Arg
20 25 30

Leu Ser Asn Lys Leu Leu Gln Tyr Asp Pro Ser Gln Asp Gln Trp Ser

35 40 45

Val Arg Ala Pro Met Lys Tyr Ser Lys Tyr Arg Phe Ser Thr Ala Val 50 55 60

Val Asn Ser Glu Ile Tyr Val Leu Gly Gly Ile Gly Cys Val Gly Gln

Asp Lys Gly Gln Val Arg Lys Cys Leu Asp Val Val Glu Ile Tyr Asn Pro Asp Gly Asp Phe Trp Arg Glu Gly Pro Pro Met Pro Ser Pro Leu Leu Ser Leu Arg Thr Asn Ser Thr Asn Ala Gly Ala Val Asp Gly Lys Leu Tyr Val Cys Gly Gly Phe His Gly Ala Asp Arg His Glu Val Ile Ser Lys Glu Ile Leu Glu Leu Asp Pro Trp Glu Asn Gln Trp Asn Val Val Ala Ile Asn Val Leu Met His Asp Ser Tyr Asp Val Cys Leu Val Ala Arg Met Asn Pro Arg Asp Leu Ile Pro Pro Pro Ser Asp Leu Val Glu Glu Gly Asn Glu His

<210> 3397

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3397

Met Leu Asp Gly Gly Arg Asn Gly Arg Leu Leu Glu Leu Ser Ser Leu

1 5 10 15

Leu Pro Glu Arg Gly Gly Gly Pro Ser Leu Cys Arg Ser Pro Ala Ser
20 25 30

Thr Glu Lys Glu Val Gly Ala Cys Gly Thr Leu Ala Ser Leu Arg Arg 35 40 45 Gly Leu Trp Lys Cys Ser Leu Cys Pro Gly Pro Ala Leu Leu Gly 60 50 55 Gly Ser Cys Cys Leu Ile Cys Ser Leu Ser Leu Leu Leu Leu Ser Thr 70 75 80 65 Pro Thr Phe Phe Ser Arg Asn Phe Glu Pro Ser Phe Ser Pro Ser Pro 85 90 95 Ile Glu Lys Pro Ser Ala Pro Ser Ser Gly Gln Ser Ser Gln Leu Gln 100 105 110 Thr Gln Val Gln Pro Pro Ala Glu Arg Gly Ala Ala Ser Met Pro Gly 115 120 125 Pro Ala Ser Leu Pro Leu Ser Thr Gly Pro Ser Gln Pro Leu Arg Cys 130 135 140 Ser Pro Arg Val Leu Cys Ser Arg Val Leu Ala Leu Arg Arg 150 155 145

<210> 3398

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3398

Met Gln Val Cys Tyr Ile Gly Ile His Met Pro Trp Trp Phe Ala Ala
1 5 10 15

Pro Ile Asn Pro Ser Ser Thr Leu Gly Ile Ser Pro Asn Ala Ile Pro
20 25 30

Thr Leu Val Pro His Leu Pro Asn Arg Pro Trp Cys Val Ile Phe Pro

35 40 45 Ser Leu Cys Pro Cys Val Leu Ile Val Gln Leu Pro Leu Met Ser Glu 50 55 60 Asn Met Gln Cys Leu Val Phe Cys Ser Cys Val Ser Leu Leu Arg Met 65 70 75 80 Met Val Ser Ser Phe Ile His Phe Pro Ala Lys Asp Met Asn Ser Ser 85 90 95 Phe Phe Tyr Gly Cys Leu Val Phe His Gly Val Tyr Met Pro His Phe 100 105 110 Leu Tyr Pro Val Tyr Pro Val Tyr Leu Leu Val Gly Ile Trp Val Gly 115 120 125 Ser Lys Ser Leu Leu Leu 130

<210> 3399

<211> 557

<212> PRT

<213> Homo sapiens

35

<400> 3399

Met Ala Ser Gly Gly Gly Cys Ser Ala Ser Glu Arg Leu Pro Pro

1 5 10 15

Pro Phe Pro Gly Leu Glu Pro Glu Ser Glu Gly Ala Ala Gly Gly Ser
20 25 30

Glu Pro Glu Ala Gly Asp Ser Asp Thr Glu Gly Glu Asp Ile Phe Thr

40

Gly Ala Ala Val Val Ser Lys His Gln Ser Pro Lys Ile Thr Thr Ser

50 55 60

45

Leu	Leu	Pro	He	Asn	Asn	Gly	Ser	Lys	Glu	Asn	Gly	He	His	Glu	Glu
65					70					75					80
Gln	Asp	Gln	Glu	Pro	Gln	Asp	Leu	Phe	Ala	Asp	Ala	Thr	Val	Glu	Leu
				85					90					95	
Ser	Leu	Asp	Ser	Thr	Gln	Asn	Asn	Gln	Lys	Lys	Val	Leu	Ala	Lys	Thr
			100					105					110		
Leu	Ile	Ser	Leu	Pro	Pro	Gln	Glu	Ala	Thr	Asn	Ser	Ser	Lys	Pro	Gln
		115					120					125			
Pro	Thr	Tyr	Glu	Glu	Leu	Glu	Glu	Glu	Glu	Gln	Glu	Asp	Gln	Phe	Asp
	130					135					140				
Leu	Thr	Val	Gly	Ile	Thr	Asp	Pro	Glu	Lys	Ile	Gly	Asp	Gly	Met	Asn
145					150					155					160
Ala	Tyr	Val	Ala	Tyr	Lys	Val	Thr	Thr	Gln	Thr	Ser	Leu	Pro	Leu	Phe
				165					170					175	
Arg	Ser	Lys	Gln	Phe	Ala	Val	Lys	Arg	Arg	Phe	Ser	Asp	Phe	Leu	Gly
			180					185					190		
Leu	Tyr	Glu	Lys	Leu	Ser	Glu	Lys	His	Ser	Gln	Asn	Gly	Phe	Ile	Val
		195					200					205			
Pro	Pro	Pro	Pro	Glu	Lys	Ser	Leu	Ile	Gly	Met	Thr	Lys	Val	Lys	Val
	210					215					220				
Gly	Lys	Glu	Asp	Ser	Ser	Ser	Ala	Glu	Phe	Leu	Glu	Lys	Arg	Arg	Ala
225					230					235					240
Ala	Leu	Glu	Arg	Tyr	Leu	Gln	Arg	Ile	Val	Asn	His	Pro	Thr	Met	Leu
				245					250					255	
Gln	Asp	Pro	Asp	Val	Arg	Glu	Phe	Leu	Glu	Lys	Glu	Glu	Leu	Pro	Arg
			260					265					270		
Ala	Val	Gly	Thr	Gln	Thr	Leu	Ser	Gly	Ala	Gly	Leu	Leu	Lys	Met	Phe
		275					280					285			
Asn	Lvs	Ala	Thr	Asp	Ala	Val	Ser	Lvs	Met	Thr	Ile	Lvs	Met	Asn	Glı

	290					295					300				
Ser	Asp	Ile	Trp	Phe	Glu	Glu	Lys	Leu	Gln	Glu	Val	Glu	Cys	Glu	Glu
305					310					315					320
Gln	Arg	Leu	Arg	Lys	Leu	His	Ala	Val	Val	Glu	Thr	Leu	Val	Asn	His
				325					330					335	
Arg	Lys	Glu	Leu	Ala	Leu	Asn	Thr	Ala	Gln	Phe	Ala	Lys	Ser	Leu	Ala
			340					345					350		
Met	Leu	Gly	Ser	Ser	Glu	Asp	Asn	Thr	Ala	Leu	Ser	Arg	Ala	Leu	Ser
		355					360					365			
Gln	Leu	Ala	Glu	Val	Glu	Glu	Lys	Ile	Glu	Gln	Leu	His	Gln	Glu	Gln
	370					375					380				
Ala	Asn	Asn	Asp	Phe	Phe	Leu	Leu	Ala	Glu	Leu	Leu	Ser	Asp	Tyr	Ile
385					390					395					400
Arg	Leu	Leu	Ala	Ile	Val	Arg	Ala	Ala	Phe	Asp	Gln	Arg	Met	Lys	Thr
				405					410					415	
Trp	Gln	Arg	Trp	Gln	Asp	Ala	Gln	Ala	Thr	Leu	Gln	Lys	Lys	Arg	Glu
			420					425					430		
Ala	Glu	Ala	Arg	Leu	Leu	Trp	Ala	Asn	Lys	Pro	Asp	Lys	Leu	Gln	Gln
		435					440					445			
Ala	Lys	Asp	Glu	Ile	Leu	Glu	Trp	Glu	Ser	Arg	Val	Thr	Gln	Tyr	Glu
	450					455					460				
	Asp	Phe	Glu	Arg		Ser	Thr	Val	Val		Lys	Glu	Val	Ile	
465					470					475					480
Phe	Glu	Lys	Glu	Lys	Ser	Lys	Asp	Phe	-	Asn	His	Val	Ile		Tyr
_			_	485	_	_			490					495	
Leu	Glu	Thr		Leu	Cys	Ser	Gln		Gln	Ala	Gly	Glu		Leu	Gly
~ .			500	.				505			_		510	0	•
He	Arg		Gly	Ile	Leu	Leu		Lys	Lys	Leu	Pro		Tyr	Ser	Lys
		515					520					525			

Phe Phe Ser Thr Val His Lys Phe Cys Ala Ala Ala Ser Leu Trp Lys 530 535 540

Trp Gly Phe Phe Leu Ser Ala Tyr Leu Ser Tyr Leu Phe 545 550 555

<210> 3400

<211> 556

<212> PRT

<213> Homo sapiens

<400> 3400

Met His Pro Met Ala Leu His Met Val Leu Pro Ala His Leu Pro Phe 1 5 10 15

Leu Ser Pro Glu Val Leu Arg Leu Leu Glu Val His Val Lys Lys Trp
20 25 30

Met His Phe Gln Arg Trp Gly Leu Pro Arg Arg Val Glu Glu Ser Leu
35 40 45

Arg Gln Leu Met Pro Asn Pro Pro Leu Tyr Tyr Gln Pro Gly Asn Asp
50 55 60

Gln Pro Val Ser Phe Asn Leu Asn Asn Thr Ser Gln Val Ser Leu His
65 70 75 80

Arg Ser Glu Thr Ile Ser Leu Gln Thr Trp Cys Ser Cys Val Ala Gly
85 90 95

Gln Pro Ile Gln Thr Phe Trp Val Ser Glu Trp Ser Thr Met Asn Pro 100 105 110

Glu Gln Arg His His Cys Gln Gln Thr Pro Asn Pro Met Ala Leu Ala 115 120 125

Leu Pro Ser Pro Ala Leu Lys Ala Leu Ser Gly Pro His Pro Gln Ser

	130					135					140				
Gly	Gly	Gln	Asp	Asn	Asp	Ser	Gly	Ser	Asp	Leu	Gln	Gln	Lys	Tyr	Ser
145					150					155					160
Gln	Leu	Phe	Cys	Gly	Leu	Pro	Ser	Leu	His	Ser	Glu	Ser	Leu	Val	Ala
				165					170					175	
Thr	Phe	Met	Gly	Ser	Gln	Gly	Leu	Pro	Lys	Ile	Glu	Asn	Val	Pro	Lys
			180					185					190		
Pro	Pro	Leu	Lys	Asp	Pro	Phe	Leu	Phe	Asn	Glu	Leu	Ser	Phe	Pro	Gln
		195					200					205			
Leu	Leu	Pro	Lys	Thr	Ser	Pro	Gln	Ser	Ala	Pro	Pro	Ser	Ser	Pro	Leu
	210					215					220				
Ser	Pro	Asn	Trp	Val	Ser	Pro	Ser	Asp	His	Gln	Arg	Ala	Gln	Ile	Asn
225					230					235					240
Val	Pro	Phe	Leu	Thr	Leu	Ala	Glu	Tyr	Glu	Ala	Leu	Glu	Trp	His	Leu
				245					250					255	
Leu	Gln	Arg	Gln	Leu	Gln	Leu	Gln	Trp	Gly	Trp	Pro	Ala	Ala	Leu	Gln
			260					265					270		
Arg	Ser	Gln	His	Thr	Gln	Cys	Leu	Met	Gln	His	Glu	Pro	Cys	Gly	Lys
		275					280					285			
Ala	Gln	Ser	Pro	Glu	Thr	Thr	Thr	Ala	Ser	Gln	Thr	Gly	Lys	Ser	Ile
	290					295					300				
Ser	Val	Leu	Thr	Arg	Glu	Leu	Leu	Phe	Phe	Pro	Glu	His	Ala	Arg	
305					310					315					320
Leu	Leu	Glu	Phe	His	Ile	Gln	Lys	Gln	Ser	Ile	Arg	His	Arg		Gly
				325					330					335	
Leu	Pro	Gln		Ile	Gln	Gln	Ser		Gln	Leu	Leu	Leu	Thr	Ser	Thr
			340					345			_		350		_
Asp	Gln		Thr	Val	Ser	Ser		Ser	Thr	Ala	Leu		Asn	Val	Ser
		355					360					365			

Ile Pro Gln Pro Val Ala Leu Glu Ala Asn Gly Ala Cys Asp Val Leu Ser Pro Ile Ala Ala Pro Val Ser Ile Pro Arg Pro His Leu Leu Thr Gln Val Lys Ala Ile Leu Gln Ser His Ile Asp Ser Lys Cys Gly Gln Ile His Gln Gly Lys Ile Pro Ala Cys Val His Arg Ser Trp Asp Cys Arg Ile Ser Gly Val Leu Ala Val Ala Pro Phe Pro Cys Ile Pro Glu Ser Gln Phe Leu Val Leu Gln Thr Ala Ser Asp Pro Asp Leu His His Lys Val Met Pro Trp Met Pro Thr Ala Leu Asp Gln Gln Gln Ala Leu Pro Gly Thr Val Thr Glu His Pro Lys Leu Leu Arg Val Leu Ser Val Glu Ala Ile Glu Lys Leu Glu Thr Thr Leu Arg His Lys His Leu Ala Phe Leu Ser Gly Leu Pro Ala Leu Tyr Tyr Val Ala Leu Pro Arg Ala Leu Ala Pro Ala Val Thr Ser Gln Ser Val Ile Thr Glu Met Glu Pro Ser Pro Val Glu Ile Pro Ala Glu Pro Leu Ile

<210> 3401

<211> 620

<212> PRT

<213> Homo sapiens

<400)> 34	101													
Met	Ala	Ser	Asp	Ser	Met	Ser	Ser	Lys	Gln	Ala	Arg	Asn	His	Ile	Thr
1				5					10					15	
Lys	Gly	Lys	Arg	Gln	Gln	Gln	His	Gln	Gln	Ile	Lys	Asn	Arg	Ser	Ser
			20					25					30		
Ile	Ser	Asp	Gly	Asp	Gly	Glu	Asp	Ser	Phe	Ile	Phe	Glu	Ala	Asn	Glu
		35					40					45			
Ala	Trp	Lys	Asp	Phe	His	Gly	Ser	Leu	Leu	Arg	Phe	Tyr	Glu	Asn	Gly
	50					55					60				
Glu	Leu	Cys	Asp	Val	Thr	Leu	Lys	Val	Gly	Ser	Lys	Leu	Ile	Ser	Cys
65					70					75					80
His	Lys	Leu	Val	Leu	Ala	Cys	Val	Ile	Pro	Tyr	Phe	Arg	Ala	Met	Phe
				85					90					95	
Leu	Ser	Glu	Met	Ala	Glu	Ala	Lys	Gln	Thr	Leu	Ile	Glu	Ile	Arg	Asp
			100					105					110		
Phe	Gly	Gly	Asp	Ala	Ile	Glu	Asp	Leu	Val	Lys	Phe	Val	Tyr	Ser	Ser
		115					120					125			
Arg	Leu	Thr	Leu	Thr	Val	Asp	Asn	Val	Gln	Pro	Leu	Leu	Tyr	Ala	Ala
	130					135					140				
Cys	Ile	Leu	Gln	Val	Glu	Leu	Val	Ala	Arg	Ala	Cys	Cys	Glu	Tyr	Met
145					150					155					160
Lys	Leu	His	Phe	His	Pro	Ser	Asn	Cys	Leu	Ala	Val	Arg	Ala	Phe	Ala
				165					170					175	

Glu Ser His Asn Arg Ile Asp Leu Met Asp Met Ala Asp Gln Tyr Ala

Cys Asp His Phe Thr Glu Val Val Glu Cys Glu Asp Phe Val Ser Val

200

185

180

195

190

205

Ser	Pro	Gln	His	Leu	His	Lys	Leu	Leu	Ser	Ser	Ser	Asp	Leu	Asn	Ile
	210					215					220				
Glu	Asn	Glu	Lys	Gln	Val	Tyr	Asn	Ala	Ala	Ile	Lys	Trp	Leu	Leu	Ala
225					230					235					240
Asn	Pro	Gln	His	His	Ser	Lys	Trp	Leu	Asp	Glu	Thr	Leu	Ala	Gln	Val
				245					250					255	
Arg	Leu	Pro	Leu	Leu	Pro	Val	Asp	Phe	Leu	Met	Gly	Val	Val	Ala	Lys
			260					265					270		
Glu	Gln	Ile	Val	Lys	Gln	Asn	Leu	Lys	Cys	Arg	Asp	Leu	Leu	Asp	Glu
		275					280					285			
Ala	Arg	Asn	Tyr	His	Leu	His	Leu	Ser	Ser	Arg	Ala	Val	Pro	Asp	Phe
	290					295					300				
Glu	Tyr	Ser	Ile	Arg	Thr	Thr	Pro	Arg	Lys	His	Thr	Ala	Gly	Val	Leu
305					310					315					320
Phe	Cys	Val	Gly	Gly	Arg	Gly	Gly	Ser	Gly	Asp	Pro	Phe	Arg	Ser	Ile
				325					330					335	
Glu	Cys	Tyr	Ser	Ile	Asn	Lys	Asn	Ser	Trp	Phe	Phe	Gly	Pro	Glu	Met
			340					345					350		
Asn	Ser	Arg	Arg	Arg	His	Val	Gly	Val	Ile	Ser	Val	Glu	Gly	Lys	Val
		355					360					365			
Tyr	Ala	Val	Gly	Gly	His	Asp	Gly	Asn	Glu	His	Leu	Gly	Ser	Met	Glu
	370					375					380				
Met	Phe	Asp	Pro	Leu	Thr	Asn	Lys	Trp	Met	Met	Lys	Ala	Ser	Met	Asn
385					390					395					400
Thr	Lys	Arg	Arg	Gly	Ile	Ala	Leu	Ala	Ser	Leu	Gly	Gly	Pro	Ile	Tyr
				405					410					415	
Ala	Ile	Gly	Gly	Leu	Asp	Asp	Asn	Thr	Cys	Phe	Asn	Asp	Val	Glu	Arg
			420					425					430		
Tvr	Asp	Ile	Glu	Ser	Asp	Gln	Trp	Ser	Thr	Val	Ala	Pro	Met	Asn	Thr

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Pro Arg Gly Gly Val Gly Ser Val Ala Leu Val Asn His Val Tyr Ala Val Gly Gly Asn Asp Gly Met Ala Ser Leu Ser Ser Val Glu Arg Tyr Asp Pro His Leu Asp Lys Trp Ile Glu Val Lys Glu Met Gly Gln Arg Arg Ala Gly Asn Gly Val Ser Lys Leu His Gly Cys Leu Tyr Val Val Gly Gly Phe Asp Asp Asn Ser Pro Leu Ser Ser Val Glu Arg Tyr Asp Pro Arg Ser Asn Lys Trp Asp Tyr Val Ala Ala Leu Thr Thr Pro Arg Gly Gly Val Gly Ile Ala Thr Val Met Gly Lys Ile Phe Ala Val Gly Gly His Asn Gly Asn Ala Tyr Leu Asn Thr Val Glu Ala Phe Asp Pro Val Leu Asn Arg Trp Glu Leu Val Gly Ser Val Ser His Cys Arg Ala Gly Ala Gly Val Ala Val Cys Ser Cys Leu Thr Ser Gln Ile Arg Asp Val Gly His Gly Ser Asn Asn Val Val Asp Cys Met

<210> 3402

<211> 137

<212> PRT

<213> Homo sapiens

<400> 3402

Met Pro Glu Val Ser Val Leu Asp Pro Leu Phe Leu Gly Cys Leu Leu

1 5 10 15

Leu Gly Phe Leu Ile Leu Asn Ser Leu Glu Phe Pro Pro Leu Pro Pro
20 25 30

Leu Phe Gln Ile Ser Tyr Ser Ser Thr Pro Ile Ala Tyr Gln Leu Cys
35 40 45

Pro Trp Asn Cys Thr Ser His Gln Gly Tyr Lys Gly Lys Ile Ser Leu 50 55 60

Cys Pro Gln Gly Ala Leu Asn Ser Ser Ser Leu Leu Ser Leu Glu Asp
65 70 75 80

Tyr Leu Leu Lys Gln Thr Ser Phe Trp Thr Val Ala Pro Phe Phe Phe 85 90 95

Phe Phe Phe His Leu Asn Tyr Gly Ser Ser Ser Thr Arg Arg Ala 100 105 110

Gly Ile Arg Thr Gln Val Arg Leu Thr Cys Pro Gly Phe Ser Phe Gln 115 120 125

Ser Ala Thr Leu Cys Leu Pro Val Asn 130 135

<210> 3403

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3403

Met Glu Ala Ala Ser Leu Trp Gly Cys Ser Arg Asp Leu Gly Arg Gly

Gly Ser Gln His Gly Cys Pro Ala Ala Gln His Gly Ala Asp Ala Glu Val Lys Glu Lys Glu Gln Glu Ala Gly Gly Val Ser Tyr Trp Asp Ile Gly Lys Asn Glu Ile Asn Ser Pro Gly Lys Arg Trp Leu Gly Lys Arg Thr Thr Glu Arg Trp Leu Gly Lys Arg Val Thr Glu Arg Trp Leu Gly Lys Arg Ala Thr Glu Arg Trp Leu Gly Lys Arg Ala Thr Glu Arg Trp Leu Gly Lys Arg Ala Thr Glu Arg Trp Leu Gly Lys Arg Ala Thr Glu Arg Trp Leu Gly Lys Arg Ala Thr Glu Arg Trp Leu Gly Lys Arg Ala Thr Glu Arg Trp Leu Gly Lys Cys Thr Thr Gly Leu Ser Gly Cys His Leu Gly Arg Gly Arg Gln Pro Ala Phe Pro Ser Phe Ala Val Thr Ala Val Ser Val Ala Val Arg Thr

<210> 3404

<211> 1140

<212> PRT

<213> Homo sapiens

<400> 3404

Met	Pro	Gln	Val	Leu	Trp	Pro	Arg	Ile	Leu	Thr	Phe	Val	Val	Pro	Ala
1				5					10					15	
Glu	Tyr	Thr	Glu	Ala	Leu	Glu	Pro	Leu	Phe	Ser	Ile	Ile	Arg	Ile	Leu
			20					25					30		
Ile	Met	Ala	Glu	Glu	Lys	Lys	Gln	His	Ser	Ala	Lys	Glu	Ser	Thr	Ala
		35					40					45			
Leu	Val	Ile	Ser	Thr	Gly	Ala	Val	Lys	Leu	Pro	Ser	Pro	Gln	Gln	Leu
	50					55					60				
Leu	Ala	Arg	Leu	Leu	Val	Ile	Ser	Met	Pro	Ala	Ser	Leu	Gly	Glu	Leu
65					70					75					80
Arg	Gly	Ala	Gly	Ala	Ile	Gly	Leu	Leu	Lys	Ile	Leu	Pro	Glu	Ile	Ile
				85					90					95	
His	Pro	Lys	Leu	,Val	Asp	Leu	Trp	Lys	Thr	Arg	Leu	Pro	Glu	Leu	Leu
			100					105					110		
Gln	Pro	Leu	Glu	Gly	Lys	Asn	Ile	Ser	Thr	Val	Leu	Trp	Glu	Thr	Met
		115					120					125			
Leu	Leu	Gln	Leu	Leu	Lys	Glu	Ser	Leu	Trp	Lys	Ile	Ser	Asp	Val	Ala
	130					135					140				
Trp	Thr	Ile	Gln	Leu	Thr	Gln	Asp	Phe	Lys	Gln	Gln	Met	Gly	Ser	Tyr
145					150					155					160
Ser	Asn	Asn	Ser	Thr	Glu	Lys	Lys	Phe	Leu	Trp	Lys	Ala	Leu	Gly	Thr
				165					170					175	
Thr	Leu	Ala	Cys	Cys	Gln	Asp	Ser	Asp	Phe	Val	Asn	Ser	Gln	Ile	Lys
			180					185					190		
Glu	Phe	Leu	Thr	Ala	Pro	Asn	Gln	Leu	Gly	Asp	Gln	Arg	Gln	Gly	Ile
		195					200					205			
Thr	Ser	Ile	Leu	Gly	Tyr	Cys	Ala	Glu	Asn	His	Leu	Asp	Ile	Val	Leu
	210					215					220				
Lys	Val	Leu	Lys	Thr	Phe	Gln	Asn	Gln	Glu	Lys	Phe	Phe	Met	Asn	Arg

225					230					235					240
Cys	Lys	Ser	Leu	Phe	Ser	Gly	Lys	Lys	Ser	Leu	Thr	Lys	Thr	Asp	Val
				245					250					255	
Met	Val	Ile	Tyr	Gly	Ala	Val	Ala	Leu	His	Ala	Pro	Lys	Lys	Gln	Leu
			260					265					270		
Leu	Ser	Arg	Leu	Asn	Gln	Asp	Ile	Ile	Ser	Gln	Val	Leu	Ser	Leu	His
		275					280					285			
Gly	Gln	Cys	Ser	Gln	Val	Leu	Gly	Met	Ser	Val	Met	Asn	Lys	Asp	Met
	290					295					300				
Asp	Leu	Gln	Met	Ser	Phe	Thr	Arg	Ser	Ile	Thr	Glu	Ile	Gly	Ile	Ala
305					310					315					320
Val	Gln	Asp	Ala	Glu	Asp	Gln	Gly	Phe	Gln	Phe	Ser	Tyr	Lys	Glu	Met
				325					330					335	
Leu	Ile	Gly	Tyr	Met	Leu	Asp	Phe	Ile	Arg	Asp	Glu	Pro	Leu	Asp	Ser
			340					345					350		
Leu	Ala	Ser	Pro	Ile	Arg	Trp	Lys	Ala	Leu	Ile	Ala	Ile	Arg	Tyr	Leu
		355					360					365			
Ser	Lys	Leu	Lys	Pro	Gln	Leu	Ser	Leu	Gln	Asp	His	Leu	Asn	Ile	Leu
	370					375					380				
Glu	Glu	Asn	Ile	Arg	Arg	Leu	Leu	Pro	Leu	Pro	Pro	Leu	Glu	Asn	Leu
385					390					395					400
Lys	Ser	Glu	Gly	Gln	Thr	Asp	Lys	Asp	Lys	Glu	His	Ile	Gln	Phe	Leu
				405					410					415	
Tyr	Glu	Arg	Ser	Met	Asp	Ala	Leu	Gly	Lys	Leu	Leu	Lys		Met	Met
			420					425					430		
Trp	Asp	Asn	Val	Asn	Ala	Glu	Asp	Cys	Gln	Glu	Met		Asn	Leu	Leu
		435					440					445			
Gln	Met	Trp	Leu	Val	Ser		Lys	Glu	Trp	Glu		Glu	Arg	Ala	Phe
	450					455					460				

Gln	Ile	Thr	Ala	Lys	Val	Leu	Thr	Lys	Asp	Ile	Glu	Ala	Pro	Glu	Asn
465					470					475					480
Phe	Lys	Ile	Gly	Ser	Leu	Leu	Gly	Leu	Leu	Ala	Pro	His	Ser	Cys	Asp
				485					490					495	
Thr	Leu	Pro	Thr	Ile	Arg	Gln	Ala	Ala	Ala	Ser	Ser	Thr	Ile	Gly	Leu
			500					505					510		
Phe	Tyr	Ile	Lys	Gly	Ile	His	Leu	Glu	Val	Glu	Arg	Leu	Gln	Gly	Leu
		515					520					525			
Gln	Glu	Gly	Leu	Glu	Ser	Asp	Asp	Val	Gln	Val	Gln	Ile	Lys	Ile	Ser
	530					535					540				
Ser	Lys	Ile	Ala	Lys	Ile	Val	Ser	Lys	Phe	Ile	Pro	Asn	Glu	Glu	Ιle
545					550					555					560
Leu	Met	Phe	Leu	Glu	Glu	Met	Leu	Asp	Gly	Leu	Glu	Ser	Leu	Asn	Pro
				565					570					575	
Thr	Cys	Thr	Lys	Ala	Cys	Gly	Ile	Trp	Met	Ile	Thr	Val	Leu	Lys	Gln
			580					585					590		
Gln	Gly	Ala	Ala	Leu	Glu	Asp	Gln	Leu	Leu	Glu	Ile	Leu	Gly	Thr	Ιlϵ
		595					600					605			
Tyr	His	His	Met	Pro	Val	Leu	Arg	Gln	Lys	Glu	Glu	Ser	Phe	Gln	Phe
	610					615					620				
Ile	Leu	Glu	Ala	Ile	Ser	Gln	Ile	Ala	Ser	Phe	His	Met	Asp	Thr	Val
625					630					635					640
Val	Val	Asn	Leu	Leu	Gln	Lys	Pro	Leu	Pro	Phe	Asp	Arg	Asp	Thr	Lys
				645					650					655	
Thr	Leu	Trp	Lys	Ala	Leu	Ala	Glu	Lys	Pro	Ala	Ser	Ser	Gly	Lys	Leu
			660					665					670		
Leu	Gln	Ala	Leu	Ile	Asp	Lys	Leu	Glu	Thr	Glu	Leu	Glu	Asp	Asp	Ιlϵ
		675					680					685			
Ala	Arg	Val	Glu	Ala	Ile	Ser	Val	Ala	Cys	Ala	Met	Tyr	Glu	Val	Ιlϵ

	690					695					700				
Ser	Met	Gly	Thr	Ser	Val	Thr	Gly	Leu	Tyr	Pro	Glu	Leu	Phe	Thr	Leu
705					710					715					720
Leu	Leu	Lys	Leu	Val	Ser	Cys	Thr	Leu	Gly	Gln	Lys	Met	Pro	Thr	Cys
				725					730					735	
Pro	Trp	Ser	His	Arg	Arg	His	Val	Met	Gln	Gln	Gly	Glu	Gln	Gln	Gln
			740					745					750		
Ile	Pro	Asp	Pro	Cys	Arg	Leu	Ser	Thr	Ala	Thr	Leu	Lys	Cys	Leu	Gln
		755					760					765			
Ala	Gln	Ala	Met	Arg	Glu	Gly	Leu	Ala	Lys	Glu	Ser	Asp	Glu	Gly	Asp
	770					775					780				
Asn	Leu	Trp	Thr	Leu	Leu	Ser	Ser	Pro	Ser	Thr	His	His	Ile	Gly	Val
785					790					795					800
Cys	Ser	Leu	Ala	Arg	Ser	Met	Ala	Val	Trp	Gln	His	Gly	Val	Ile	Leu
				805					810					815	
Asp	Ile	Met	Glu	Gln	Leu	Leu	Ser	Ser	Leu	Thr	Ser	Ser	Ser	Glu	Asn
			820					825					830		
Tyr	Arg	Ile	Thr	Gly	Ala	Ala	Phe	Phe	Ser	Glu	Leu	Met	Lys	Glu	Pro
		835					840					845			
Ile	Leu	Trp	Lys	His	Gly	Asn	Leu	Arg	Asn	Val	Leu	Ile	Leu	Met	Asp
	850					855					860				
Gln	Ser	Ala	Trp	Asp	Ser	Asn	Ala	Thr	Leu	Arg	Gln	Met	Ala	Ile	Arg
865					870					875					880
Gly	Leu	Gly	Asn	Thr	Ala	Ser	Gly	Ala	Pro	His	Lys	Val	Lys	Lys	His
				885					890					895	
Lys	Gln	Leu	Met	Leu	Glu	Ser	Ile	Ile	Arg	Gly	Leu	Tyr	His	Leu	Ala
			900					905					910		
Arg	Thr	Glu	Val	Val	Cys	Glu	Ser	Leu	Lys	Ala	Leu	Lys	Lys	Ile	Leu
		915					920					925			

Glu	Leu	Leu	Thr	Asp	Arg	Asp	Val	Ser	Phe	Tyr	Phe	Lys	Glu	He	Val
	930					935					940				
Leu	Gln	Thr	Arg	Thr	Phe	Phe	Glu	Asp	Glu	Gln	Asp	Asp	Val	Arg	Leu
945					950					955					960
Thr	Ala	Ile	Phe	Leu	Phe	Glu	Asp	Leu	Ala	Pro	Leu	Thr	Gly	Arg	Arg
				965					970					975	
Trp	Lys	Ile	Phe	Phe	Ala	Glu	Glu	Ile	Lys	Lys	Ser	Leu	Ile	Ser	Phe
			980					985					990		
Leu	Leu	His	Leu	Trp	Asp	Pro	Asn	Pro	Lys	Ile	Gly	Val	Ala	Cys	Arg
		995					1000					1005			
Asp	Val	Leu	Met	Val	Cys	Ile	Pro	Phe	Leu	Gly	Leu	Gln	Glu	Leu	Tyr
	1010					1015					1020				
Gly	Val	Leu	Asp	Arg	Leu	Leu	Asp	Gln	Asp	Leu	Pro	Arg	Ala	Arg	Asp
102	5				1030					1035				-	1040
Phe	Tyr	Arg	Gln	Phe	Cys	Val	Lys	Leu	Ala	Lys	Lys	Asn	Gln	Glu	Ile
				1045					1050					1055	
Leu	Trp	Ile	Leu	His	Thr	His	Ser	Phe	Thr	Phe	Phe	Thr	Ser	Thr	Trp
			1060					1065					1070		
Glu	Val	Ile	Arg	Ser	Ala	Ala	Val	Lys	Leu	Thr	Asp	Ala	Val	Val	Leu
		1075					1080					1085			
Asn	Leu	Thr	Ser	Gln	Tyr	Val	Glu	Leu	Leu	Asp	Arg	Glu	Gln	Leu	Thr
	1090					1095					1100				
Thr	Arg	Leu	Gln	Ala	Leu	Arg	Gln	Asp	Pro	Cys	Ile	Ser	Val	Gln	Arg
110	5				1110					1115					1120
Ala	Ala	Glu	Ala	Ala	Leu	Gln	Thr	Leu	Leu	Arg	Arg	Cys	Lys	Glu	Thr
				1125					1130					1135	
Ser	Ile	Pro	Leu												
			1140												

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3405

Met Ala Glu Thr Glu Arg Asn Asp Glu Glu Gln Phe Glu Cys Gln Glu

1 5 10 15

Leu Leu Glu Cys Gln Val Gln Val Glu Ala Glu Ala Val Ala Ala Gly
20 25 30

Trp Met Leu Asp Phe Leu Cys Leu Ser Leu Cys Arg Ala Phe Arg Asp
35 40 45

Gly Arg Ser Glu Asp Phe Arg Arg Thr Arg Asn Ser Ala Glu Gly Glu
50 55 60

Cys Arg Pro Arg Pro Gly Arg Asp Tyr Ala Gly Gly Gly Cys Gly Leu 65 70 75 80

Arg Gly Ala Arg Gln Arg Ala Gly Ser Leu Arg Arg Arg Gly Arg Ser

85 90 95

Gly Glu Arg Gly Cys Cys Gly Arg Leu Ala Gly Ser Pro Arg Leu Arg 100 105 110

Ala Glu Leu Cys Ser Asn Pro Gly Ser Pro Val Val Ser Thr
115 120 125

<210> 3406

<211> 385

<212> PRT

<213> Homo sapiens

<400)> 34	106													
Met	Val	Ala	Val	Ser	Ser	Glu	Leu	Leu	Gly	Thr	Leu	Pro	Arg	Trp	Gly
1				5					10					15	
Gly	Leu	Ala	Glu	Ala	Leu	Leu	Thr	Ser	Gln	Met	Gly	Arg	Pro	Gly	Arg
			20					25					30		
Gly	Ala	Pro	His	Leu	Pro	Asp	Gly	Ala	Ala	Trp	Gln	Arg	Arg	Ser	Ser
		35					40					45			
Pro	Pro	Arg	Arg	Gly	Gly	Arg	Ala	Glu	Ala	Leu	Pro	Thr	Ser	Gln	Met
	50					55					60				
Gly	Arg	Pro	Gly	Arg	Gly	Ala	Pro	His	Leu	Pro	Asp	Asp	Gly	Arg	Ser
65					70					75					80
Gly	Arg	Gly	Ala	Pro	His	Leu	Pro	Asp	Glu	Gly	Arg	Pro	Gly	Arg	Gly
				85					90					95	
Ala	Pro	His	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Gln	Arg	Arg	Pro	Ser	Pro
			100					105					110		
Pro	Arg	Arg	Gly	Gly	Arg	Ala	Glu	Ala	Pro	Leu	Thr	Ser	Gln	Ala	Gly
		115					120					125			
Arg	Pro	Gly	Arg	Gly	Ala	Pro	His	Leu	Pro	Asp	Gly	Ala	Ala	Gly	Gln
	130					135		•			140				
Arg	Leu	Pro	Gln	Pro	Pro	Arg	Gly	Arg	Ala	Ala	Gly	Gln	Arg	Ser	Pro
145					150					155					160
Ser	Pro	Pro	Arg	Gln	Gly	Gly	Arg	Ala	Glu	Ala	Leu	Leu	Thr	Ser	Gln
				165					170					175	
Thr	Gly	Arg	Pro	Gly	Arg	Gly	Ser	Pro	Asn	Leu	Pro	Asp	Glu	Gly	Arg
			180					185					190		
Pro	Gly	Arg	Gly	Ala	Pro	His	Leu	Pro	Gly	Arg	Ala	Ala	Gly	Gln	Arg
		195					200					205			
Arg	Ser	Ser	Pro	Pro	Arg	Arg	Gly	Gly	Arg	Ala	Glu	Ala	Leu	Leu	Thr

	210					215					220				
Ser	Gln	Thr	Met	Gly	Gly	Arg	Ala	Glu	Ala	Leu	Leu	Thr	Ser	Gln	Thr
225					230					235					240
Gly	Gln	Leu	Gly	Arg	Gly	Ala	Pro	His	Phe	Pro	Asp	Gly	Ala	Ala	Gly
				245					250					255	
Gln	Arg	Arg	Ser	Ser	His	Pro	Arg	Arg	Trp	Ala	Ala	Arg	Gln	Arg	Arg
			260					265					270		
Ser	Ser	His	Pro	Arg	Arg	Trp	Ala	Ala	Gly	Gln	Arg	Arg	Ser	Ser	Pro
		275					280					285			
Pro	Arg	Arg	Gly	Gly	Arg	Ala	Glu	Ala	Leu	Leu	Ala	Ser	Gln	Thr	Gly
	290					295					300				
Trp	Trp	Pro	Gly	Arg	Asp	Ala	Pro	Arg	Leu	Gln	Asp	Gly	Val	Ala	Ala
305					310					315					320
Gly	His	Arg	Cys	Ser	Ser	Pro	Pro	Arg	Arg	Gly	Gly	Gly	Ala	Glu	Ala
				325					330					335	
Leu	Leu	Thr	Ser	Gln	Thr	Glu	Gln	Pro	Gly	Arg	Gly	Ala	Pro	His	Phe
			340					345					350		
Pro	Asp	Val	Ser	Val	Arg	Gln	Arg	Arg	Ser	Ser	His	Pro	Arg	Arg	Trp
		355					360					365			
Ala	Ala	Glu	Gln	Arg	His	Ser	Ser	His	Pro	Arg	Arg	Trp	Ala	Ala	Arg
	370					375					380				
Gln															
385															

<211> 412

<212> PRT

<213> Homo sapiens

<400> 3407 Met Lys Arg His Glu Met Val Ala Lys Pro Pro Ala Met Cys Ser His Phe Ala Lys Asp Leu Arg Pro Glu Gln Tyr Ile Lys Asn Ser Phe Gln Gln Val Ile Leu Arg Arg Tyr Gly Lys Cys Gly Tyr Gln Lys Gly Cys Lys Ser Val Asp Glu His Lys Leu His Thr Gly Gly His Lys Gly Leu Asn Arg Cys Val Thr Thr Gln Ser Lys Ile Val Gln Cys Asp Lys Tyr Val Lys Val Phe His Lys Tyr Ser Asn Ala Lys Arg His Lys Ile Arg His Thr Gly Lys Asn Pro Phe Lys Cys Lys Glu Cys Gly Lys Ser Phe Cys Met Leu Ser Gln Leu Thr Gln His Glu Ile Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Lys Lys Ser Ser Asn Leu Thr Asn His Lys Ile Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn Gln Ser Ser Thr Leu Thr Arg His Lys Ile Ile His Thr Gly Glu Lys Leu Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn Arg Ser Ser Asn Leu Thr Lys His Lys Ile

Val His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala

	010					015					000				
	210					215					220				
Phe	Lys	Gln	Ser	Ser	Asn	Leu	Thr	Asn	His	Lys	Lys	Ile	His	Thr	Gly
225					230					235					240
Glu	Lys	Pro	Tyr	Lys	Cys	Gly	Glu	Cys	Gly	Lys	Ala	Phe	Thr	Leu	Ser
				245					250					255	
Ser	His	Leu	Thr	Thr	His	Lys	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr
			260					265					270		
Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Val	Phe	Ser	Thr	Leu	Thr
		275					280					285			
Lys	His	Lys	Ile	Ile	His	Thr	Glu	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu
	290					295					300				
Cys	Gly	Lys	Ala	Phe	Asn	Arg	Ser	Ser	His	Leu	Thr	Asn	His	Lys	Val
305					310					315					320
Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala
				325					330					335	
Phe	Thr	Lys	Ser	Ser	Thr	Leu	Thr	Tyr	His	Lys	Val	Ile	His	Thr	Gly
			340					345					350		
Lys	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Ile	Phe
		355					360					365			
Ser	Ile		Thr	Lys	His	Lys		Ile	His	Thr	Glu	Asp	Lys	Pro	Tyr
	370			J		375					380	-	-		-
Lvs		Glu	Glu	Cvs	Glv		Thr	Phe	Asn	Tvr	Ser	Ser	Asn	Phe	Thr
385	0,0	J. u	J. u	2,3	390	 , 0				395					400
	ប: ~	T ***	T	100		Т	Trn	1	61		Lou				-00
ASII	His	LyS	LyS	изп	Sel	1 9 1	тър	viå	uıu	1111	Leu				

410

<210> 3408

405

<211> 194

<212> PRT

<213> Homo sapiens

20

<400> 3408

Met Pro Ala Pro His Phe Leu Tyr Ser Leu Arg Asn Tyr Glu Pro Met

1 5 10 15

Lys Pro Leu Phe Phe Ile Asn Tyr Pro Val Ser Asp Met Glu Leu Pro

25

30

Val Arg Ser Ser Thr Val Thr Leu Leu Pro Ala Pro Leu Pro Arg Arg
35 40 45

Gly Ser Val Lys Thr Phe Leu Ala Pro Ser Lys Ser Tyr Phe Pro Glu
50 55 60

Glu Glu Arg Ala Leu Leu Lys. Ser Ser His Ala Phe Cys Thr Gly Leu
65 70 75 80

Trp Pro Trp Arg Arg Asp Phe Gln Leu Pro Gln Cys His Leu Ala Leu 85 90 95

Gly Leu Leu Pro Gly Glu Arg Ser Val Arg Leu Pro Arg Phe Leu Ala 100 105 110

Val Leu Lys Glu Leu Ser Ala Thr Ala Ser Phe Thr Leu Ala Ser Glu
115 120 125

Ala Ile Pro Phe Leu Ser Ser Phe Pro Phe Pro Trp Asn Leu Leu Leu 130 135 140

Pro Ser Val Phe Gln Ala Leu Pro Gln Lys Trp Gln Phe Lys Ala Asp 145 150 155 160

Phe Leu Leu Glu Cys Thr Leu Ser Val Lys Glu Ala Phe His Gln Glu 165 170 175

Cys Gly Ala Gly Val Ser Leu Ala Asn Gly Leu Asn Lys Gly Leu Arg 180 185 190

Thr Gly

<211> 664

<212> PRT

<213> Homo sapiens

<400> 3409

Met Thr Glu Lys Thr Asn Gly Val Lys Ser Ser Pro Ala Asn Asn His

1 5 10 15

Asn His His Ala Pro Pro Ala Ile Lys Ala Asn Gly Lys Asp Asp His
20 25 30

Arg Thr Ser Ser Arg Pro His Ser Ala Ala Asp Asp Asp Thr Ser Ser

35 40 45

Glu Leu Gln Arg Leu Ala Asp Val Asp Ala Pro Gln Gln Gly Arg Ser
50 55 60

Gly Phe Arg Arg Ile Val Arg Leu Val Gly Ile Ile Arg Glu Trp Ser
65 70 75 80

Asn Lys Asn Phe Arg Glu Glu Glu Pro Arg Pro Asp Ser Phe Leu Glu

85 90 95

Arg Phe Arg Gly Pro Glu Leu Gln Thr Val Thr Thr Gln Glu Gly Asp
100 105 110

Gly Lys Gly Asp Lys Asp Gly Glu Asp Lys Gly Thr Lys Lys Phe
115 120 125

Glu Leu Phe Val Leu Asp Pro Ala Gly Asp Trp Tyr Tyr Cys Trp Leu 130 135 140

Phe Val Ile Ala Met Pro Val Leu Tyr Asn Trp Cys Leu Leu Val Ala 145 150 155 160

Arg	Ala	Cys	Phe	Ser	Asp	Leu	Gln	Lys	Gly	Tyr	Tyr	Leu	Val	Trp	Leu
				165					170					175	
Val	Leu	Asp	Tyr	Val	Ser	Asp	Val	Val	Tyr	Ile	Ala	Asp	Leu	Phe	Ile
			180					185					190		
Arg	Leu	Arg	Thr	Gly	Phe	Leu	Glu	Gln	Gly	Leu	Leu	Val	Lys	Asp	Thr
		195					200					205			
Lys	Lys	Leu	Arg	Asp	Asn	Tyr	Ile	His	Thr	Leu	Gln	Phe	Lys	Leu	Asp
	210					215					220				
Val	Ala	Ser	Ile	Ile	Pro	Thr	Asp	Leu	Ile	Tyr	Phe	Ala	Val	Asp	Ile
225					230					235					240
His	Ser	Pro	Glu	Val	Arg	Phe	Asn	Arg	Leu	Leu	His	Phe	Ala	Arg	Met
				245					250					255	
Phe	Glu	Phe	Phe	Asp	Arg	Thr	Glu	Thr	Arg	Thr	Asn	Tyr	Pro	Asn	Ιlε
			260					265		-			270		
Phe	Arg	Ile	Ser	Asn	Leu	Val	Leu	Tyr	Ile	Leu	Val	Ile	Ile	His	Trp
		275					280					285			
Asn	Ala	Cys	Ile	Tyr	Tyr	Ala	Ile	Ser	Lys	Ser	Ile	Gly	Phe	Gly	Val
	290					295					300				
Asp	Thr	Trp	Val	Tyr	Pro	Asn	Ile	Thr	Asp	Pro	Glu	Tyr	Gly	Tyr	Let
305					310					315					320
Ala	Arg	Glu	Tyr	Ile	Tyr	Cys	Leu	Tyr	Trp	Ser	Thr	Leu	Thr	Leu	Thr
				325					330					335	
Thr	Ile	Gly	Glu	Thr	Pro	Pro	Pro	Val	Lys	Asp	Glu	Glu	Tyr	Leu	Phe
			340					345					350		
Val	Ile	Phe	Asp	Phe	Leu	Ile	Gly	Val	Leu	Ile	Phe	Ala	Thr	Ile	Val
		355					360					365			
Gly	Asn	Val	Gly	Ser	Met	Ile	Ser	Asn	Met	Asn	Ala	Thr	Arg	Ala	Glu
	370					375					380				
Phe	Gln	Ala	Lvs	Ile	Asp	Ala	Val	Lvs	His	Tvr	Met	Gln	Phe	Arg	Lvs

385					390					395					400
Val	Ser	Ly.s	Gly	Met	Glu	Ala	Lys	Val	Ile	Arg	Trp	Phe	Asp	Tyr	Leu
				405					410					415	
Trp	Thr	Asn	Lys	Lys	Thr	Val	Asp	Glu	Arg	Glu	Ile	Leu	Lys	Asn	Leu
			420		•			425					430		
Pro	Ala	Lys	Leu	Arg	Ala	Glu	Ile	Ala	Ile	Asn	Val	His	Leu	Ser	Thr
		435					440					445			
Leu	Lys	Lys	Val	Arg	Ile	Phe	His	Asp	Cys	Glu	Ala	Gly	Leu	Leu	Val
	450					455					460	•			
Glu	Leu	Val	Leu	Lys	Leu	Arg	Pro	Gln	Val	Phe	Ser	Pro	Gly	Asp	Tyr
465					470					475					480
Ile	Cys	Arg	Lys	Gly	Asp	Ile	Gly	Lys	Glu	Met	Tyr	Ile	Ile	Lys	Glu
				485					490					495	
Gly	Lys	Leu	Ala	Val	Val	Ala	Asp	Asp	Gly	Val	Thr	Gln	Tyr	Ala	Leu
			500					505					510		
Leu	Ser	Ala	Gly	Ser	Cys	Phe	Gly	Glu	Ile	Ser	Ile	Leu	Asn	Ile	Lys
		515					520					525			
Gly	Ser	Lys	Met	Gly	Asn	Arg	Arg	Thr	Ala	Asn	Ile	Arg	Ser	Leu	Gly
	530					535					540				
Tyr	Ser	Asp	Leu	Phe	Cys	Leu	Ser	Lys	Asp	Asp	Leu	Met	Glu	Ala	Val
545					550					555					560
Thr	Glu	Tyr	Pro	Asp	Ala	Lys	Lys	Val	Leu	Glu	Glu	Arg	Gly	Arg	Glu
				565					570					575	
Ile	Leu	Met	Lys	Glu	Gly	Leu	Leu	Asp	Glu	Asn	Glu	Val	Ala	Thr	Ser
			580					585					590		
Met	Glu	Val	Asp	Val	Gln	Glu	Lys	Leu	Gly	Gln	Leu	Glu	Thr	Asn	Met
		595					600					605			
Glu	Thr	Leu	Tyr	Thr	Arg	Phe	Gly	Arg	Leu	Leu	Ala	Glu	Tyr	Thr	Gly
	610					615					620				

Ala Gln Gln Lys Leu Lys Gln Arg IIe Thr Val Leu Glu Thr Lys Met 625 630 635 640

Lys Gln Asn Asn Glu Asp Asp Tyr Leu Ser Asp Gly Met Asn Ser Pro 645 655

Glu Leu Ala Ala Ala Asp Glu Pro 660

<210> 3410

<211> 540

<212> PRT

<213> Homo sapiens

<400> 3410

Met Gly Arg Cys Arg Gln Asp Asn Gly Gly Ser Ser Gly Pro Thr Glu

1 5 10 15

Gln Ala Ala Trp Arg Tyr Ser Gln Thr His Gln Ala Ile Leu Gly Pro 20 25 30

Phe Gly Glu Leu Leu Thr Glu Asp Asp Leu Val Tyr Leu Glu Lys Gln
35 40 45

Ile Ala Asp Leu Gln Leu Arg Arg Cys Gln Glu Tyr Glu Ser Glu
50 55 60

Leu Gly Arg Leu Ala Ala Glu Leu Gln Ala Leu Leu Pro Glu Pro Leu 65 70 75 80

Val Ser Ile Thr Val Asn Ser His Phe Leu Pro Arg Ala Pro Gly Leu 85 90 95

Glu Val Glu Glu Ala Ser Ile Pro Ala Ala Glu Pro Ala Gly Ser Ala 100 105 110

Glu Ala Ser Glu Val Ala Pro Gly Val Gln Pro Leu Pro Phe Trp Cys

		115					120					125			
Ser	His	Ile	Ser	Arg	Leu	Val	Arg	Ser	Leu	Ser	Leu	Leu	Leu	Lys	Gly
	130					135					140				
Val	His	Gly	Leu	Val	Gln	Gly	Asp	Glu	Lys	Pro	Ser	Thr	Arg	Pro	Leu
145					150					155					160
Gln	Asp	Thr	Cys	Arg	Glu	Ala	Ser	Ala	Ser	Pro	Pro	Arg	Şer	Glu	Ala
				165					170					175	
Gln	Arg	Gln	Ile	Gln	Glu	Trp	Gly	Val	Ser	Val	Arg	Thr	Leu	Arg	Gly
			180					185					190		
Asn	Phe	Glu	Ser	Ala	Ser	Gly	Pro	Leu	Cys	Gly	Phe	Asn	Pro	Gly	Pro
		195					200					205			
Cys	Glu	Pro	Gly	Ala	Gln	His	Arg	Gln	Cys	Leu	Ser	Gly	Cys	Trp	Pro
	210					215					220				
Ala	Leu	Pro	Lys	Pro	Arg	Ser	Gly	Leu	Ala	Ser	Gly	Glu	Pro	Arg	Pro
225					230					235					240
Gly	Asp	Thr	Glu	Glu	Ala	Ser	Asp	Ser	Gly	Ile	Ser	Cys	Glu	Glu	Val
				245					250					255	
Pro	Ser	Glu	Ala	Gly	Ala	Ala	Ala	Gly	Pro	Asp	Leu	Ala	Ser	Leu	Arg
			260					265		•			270		
Lys	Glu	Arg	Ile	Ile	Met	Leu	Phe	Leu	Ser	His	Trp	Arg	Arg	Ser	Ala
		275					280					285			
Tyr	Thr	Pro	Ala	Leu	Lys	Thr	Val	Ala	Cys	Arg	Thr	Leu	Gly	Ala	Arg
	290					295					300				
His	Ala	Gly	Leu	Arg	Gly	Gln	Glu	Ala	Ala	Arg	Ser	Pro	Gly	Pro	Pro
305					310					315					320
Ser	Pro	Pro	Ser	Glu	Gly	Pro	Arg	Leu	Gly	His	Leu	Trp	Gln	Gln	Arg
				325					330					335	
Ser	Thr	Ile	Thr	His	Leu	Leu	Gly	Asn	Trp	Lys	Ala	Ile	Met	Ala	His
			340					345					350		

Val Pro Ala Arg Gln Leu Arg Arg Leu Ser Arg Gln Pro Arg Gly Ala Leu Ser Pro Glu Gln Phe Leu Pro His Val Asp Gly Ala Pro Val Pro Tyr Ser Ser Leu Ser Leu Asp Leu Phe Met Leu Gly Tyr Phe Gln Leu Leu Glu Cys Asp Leu Pro Ala Glu Glu Arg Lys Leu Arg His Leu Leu Cys Phe Glu Val Phe Glu His Leu Gly Thr His Gly Trp Glu Ala Val Arg Ala Phe His Lys Ala Val Thr Asp Glu Val Ala Ala Gly Arg Arg Ala Trp Thr Asp Gly Phe Glu Asp Ile Lys Ala Arg Phe Phe Gly Ser Ser Gln Arg Pro Ala Trp Asp Thr Glu Pro Gly Arg Lys Ser Gly Leu Thr Leu Leu Gly Pro Leu Pro His Ala Ala Val Pro Cys Ser Gly Pro Glu Pro Thr Ala Gln Arg Leu Gly Ser Arg Ser Gln Gln Gly Ser Phe Asn Gly Glu Asp Ile Cys Gly Tyr Ile Asn Arg Ser Phe Ala Phe Trp Lys Glu Lys Glu Ala Glu Met Phe Asn Phe Gly Glu

<210> 3411

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3411

Met Arg Arg Asn Gln Lys Ala Asn Ser Gly Asn Met Thr Lys Gln Gly

1 5 10 15

Ser Leu Thr Pro Ser Lys His His Thr Ser Ser Leu Ala Met Asp Pro 20 25 30

Asn Lys Glu Glu Ile Pro Asp Leu Pro Glu Lys Glu Phe Arg Leu Val
35 40 45

Ile Lys Leu Met Arg Glu Ala Thr Glu Lys Gly Lys Ala Gln Cys Lys
50 55 60

Gly Ile Lys Lys Asn Asp Ile Arg Ser Glu Gly Lys Asn Ile Gln Arg
65 70 75 80

Asn Ser Ile Asn Lys Lys Ser Lys Leu Gln Lys Thr Met Gly Thr Leu

85 90 95

Thr Glu Met Gln Asn Ala Leu Glu Asn Leu Ser Lys Ile Ser Gly Pro 100 105 110

Gly Arg Leu Val Ser Arg Cys Gln Arg Asp Leu Val Gly Cys His Gln 115 120 125

Val Gly Leu Pro Leu Asn Leu Cys Lys Arg Asp Thr Asn Leu Val Ser 130 135 140

Ser Phe Ser Lys Glu His Ile Gly Pro Gln Leu Ala Leu Thr His Lys 145 150 155 160

His His Leu Leu Val Phe Arg Pro Asp Cys Thr Ala Gln Tyr Lys Thr 165 170 175

Cys Leu Gly Lys Cys Ile Ala

180

<210> 3412 <211> 210

<212> PRT

<213> Homo sapiens

<400> 3412

Met Pro Val Ser Pro Ala Pro Val Ala Val Ser Leu Val Pro Ala Pro 1 5 10 15

Ala Thr Ala Pro Ala Pro Arg Pro Leu Gly Ser Ile Gln Arg Pro Asn 20 25 30

Ser Phe Leu Phe Arg Ser Ser Ser Gln Ser Gly Ser Gly Pro Ser Ser 35 40 45

Pro Asp Ser Val Leu Arg Pro Arg Arg Tyr Pro Gln Val Pro Asp Glu
50 55 60

Lys Asp Leu Met Thr Gln Leu Arg Gln Val Leu Glu Ser Arg Leu Gln 65 70 75 80

Arg Pro Leu Pro Glu Asp Leu Ala Glu Ala Leu Ala Ser Gly Val Ile 85 90 95

Leu Cys Gln Leu Ala Asn Gln Leu Arg Pro Arg Ser Val Pro Phe Ile 100 105 110

His Val Pro Ser Pro Ala Val Pro Lys Leu Ser Ala Leu Lys Ala Arg 115 120 125

Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys Met Gly Val Pro 130 135 140

Glu Ala Asp Leu Cys Ser Pro Ser Asp Leu Leu Gln Gly Thr Ala Arg

145 150 155 160

Gly Leu Arg Thr Ala Leu Glu Ala Met Lys Arg Val Gly Gly Lys Ala 165 170 175

Leu Pro Pro Leu Trp Pro Pro Ser Gly Leu Gly Gly Phe Val Val Phe

180 185 190

Tyr Val Val Leu Met Leu Leu Leu Tyr Val Thr Tyr Thr Arg Leu Leu
195 200 205

Gly Ser

210

<210> 3413

<211> 799

<212> PRT

<213> Homo sapiens

<400> 3413

Met Leu Glu Glu Glu Thr Asp Gln Thr Tyr Glu Asn Val Leu Ala Glu

1 5 10 15

Ile Gln Ser Phe Glu Leu Pro Ile Glu Ala Thr Leu Arg Ser Val Tyr
20 25 30

Asp Asp Gln Pro Asn Ala His Lys Lys Phe Met Glu Lys Leu Asp Ala

35

40

45

Cys Ile Arg Asn His Asp Lys Glu Ile Glu Lys Met Cys Asn Phe His
50 55 60

His Gln Gly Phe Val Asp Ala Ile Thr Glu Leu Leu Lys Val Arg Thr 65 70 75 80

Asp Ala Glu Lys Leu Lys Val Gln Val Thr Asp Thr Asn Arg Arg Phe
85 90 95

Gln Asp Ala Gly Lys Glu Val Ile Val His Thr Glu Asp Ile Ile Arg 100 105 110

Cys Arg Ile Gln Gln Arg Asn Ile Thr Thr Val Val Glu Lys Leu Gln 115 120 125

Leu	Cys	Leu	Pro	Val	Leu	Glu	Met	Tyr	Ser	Lys	Leu	Lys	Glu	Gln	Met
	130					135					140				
Ser	Ala	Lys	Arg	Tyr	Tyr	Ser	Ala	Leu	Lys	Thr	Met	Glu	Gln	Leu	Glu
145					150					155					160
Asn	Val	Tyr	Phe	Pro	Trp	Val	Ser	Gln	Tyr	Arg	Phe	Cys	Gln	Leu	Met
				165					170					175	
Ile	Glu	Asn	Leu	Pro	Lys	Leu	Arg	Glu	Asp	Ile	Lys	Glu	Ile	Ser	Met
			180					185					190		
Ser	Asp	Leu	Lys	Asp	Phe	Leu	Glu	Ser	Ile	Arg	Lys	His	Ser	Asp	Lys
		195					200					205			
Ile	Gly	Glu	Thr	Ala	Met	Lys	Gln	Ala	Gln	His	Gln	Lys	Thr	Phe	Ser
	210					215					220				
Val	Ser	Leu	Gln	Lys	Gln	Asn	Lys	Met	Lys	Phe	Gly	Lys	Asn	Met	Tyr
225					230					235					240
Ile	Asn	Arg	Asp	Arg	Ile	Pro	Glu	Glu	Arg	Asn	Glu	Thr	Val	Leu	Lys
				245					250					255	
His	Ser	Leu	Glu	Glu	Glu	Asp	Glu	Asn	Glu	Glu	Glu	Ile	Leu	Thr	Val
			260					265					270		
Gln	Asp	Leu	Val	Asp	Phe	Ser	Pro	Val	Tyr	Arg	Cys	Leu	His	Ile	Tyr
		275					280					285			
Ser	Val	Leu	Gly	Asp	Glu	Glu	Thr	Phe	Glu	Asn	Tyr	Tyr	Arg	Lys	Gln
	290					295					300				
Arg	Lys	Lys	Gln	Ala	Arg	Leu	Val	Leu	Gln	Pro	Gln	Ser	Asn	Met	His
305					310					315					320
Glu	Thr	Val	Asp	Gly	Tyr	Arg	Arg	Tyr	Phe	Thr	Gln	Ile	Val	Gly	Phe
				325					330					335	
Phe	Val	Val	Glu	Asp	His	Ile	Leu	His	Val	Thr	Gln	Gly	Leu	Val	Thr
			340					345					350		
Arg	Ala	Tyr	Thr	Asp	Glu	Leu	Trp	Asn	Met	Ala	Leu	Ser	Lys	Ile	Ile

		355					360					365			
Ala	Val	Leu	Arg	Ala	His	Ser	Ser	Tyr	Cys	Thr	Asp	Pro	Asp	Leu	Val
	370					375					380				
Leu	Glu	Leu	Lys	Asn	Leu	Ile	Val	Ile	Phe	Ala	Asp	Thr	Leu	Gln	Gly
385					390					395					400
Tyr	Gly	Phe	Pro	Val	Asn	Arg	Leu	Phe	Asp	Leu	Leu	Phe	Glu	Ile	Arg
				405					410					415	
Asp	Gln	Tyr	Asn	Glu	Thr	Leu	Leu	Lys	Lys	Trp	Ala	Gly	Val	Phe	Arg
			420					425					430		
Asp	Ile	Phe	Glu	Glu	Asp	Asn	Tyr	Ser	Pro	Ile	Pro	Val	Val	Asn	Glu
		435					440					445			
Glu	Glu	Tyr	Lys	Ile	Val	Ile	Ser	Lys	Phe	Pro	Phe	Gln	Asp	Pro	Asp
	450					455					460				
Leu	Glu	Lys	Gln	Ser	Phe	Pro	Lys	Lys	Phe	Pro	Met	Ser	Gln	Ser	Val
465					470					475					480
Pro	His	Ile	Tyr	Ile	Gln	Val	Lys	Glu	Phe	Ile	Tyr	Ala	Ser	Leu	Lys
				485					490					495	
Phe	Ser	Glu	Ser	Leu	His	Arg	Ser	Ser	Thr	Glu	Ile	Asp	Asp	Met	Leu
			500					505					510		
Arg	Lys	Ser	Thr	Asn	Leu	Leu	Leu	Thr	Arg	Thr	Leu	Ser	Ser	Cys	Leu
		515					520					525			
Leu	Asn	Leu	Ile	Arg	Lys	Pro	His	Ile	Gly	Leu	Thr	Glu	Leu	Val	Gln
	530					535					540				
Ile	Ile	Ile	Asn	Thr	Thr	His	Leu	Glu	Gln	Ala	Cys	Lys	Tyr	Leu	Glu
545					550					555					560
Asp	Phe	Ile	Thr	Asn	Ile	Thr	Asn	Ile	Ser	Gln	Glu	Thr	Val	His	Thr
				565					570					575	
Thr	Arg	Leu	Tyr	Gly	Leu	Ser	Thr	Phe	Lys	Asp	Ala	Arg	His	Ala	Ala
			580					585					590		

Glu	Gly	Glu	Ile	Tyr	Thr	Lys	Leu	Asn	Gln	Lys	Ile	Asp	Glu	Phe	Val
		595					600					605			
Gln	Leu	Ala	Asp	Tyr	Asp	Trp	Thr	Met	Ser	Glu	Pro	Asp	Gly	Arg	Ala
	610					615					620				
Ser	Gly	Tyr	Leu	Met	Asp	Leu	Ile	Asn	Phe	Leu	Arg	Ser	Ile	Phe	Gln
625					630					635					640
Val	Phe	Thr	His	Leu	Pro	Gly	Lys	Val	Ala	Gln	Thr	Ala	Cys	Met	Ser
				645					650					655	
Ala	Cys	Gln	His	Leu	Ser	Thr	Ser	Leu	Met	Gln	Met	Leu	Leu	Asp	Ser
			660					665					670		
Glu	Leu	Lys	Gln	Ile	Ser	Met	Gly	Ala	Val	Gln	Gln	Phe	Asn	Leu	Asp
		675					680					685			
Val	Ile	Gln	Cys	Glu	Leu	Phe	Ala	Ser	Ser	Glu	Pro	Val	Pro	Gly	Phe
	690					695					700				
Gln	Gly	Asp	Thr	Leu	Gln	Leu	Ala	Phe	Ile	Asp	Leu	Arg	Gln	Leu	Leu
705					710					715					720
Asp	Leu	Phe	Met	Val	Trp	Asp	Trp	Ser	Thr	Tyr	Leu	Ala	Asp	Tyr	Gly
				725					730					735	
Gln	Pro	Ala	Ser	Lys	Tyr	Leu	Arg	Val	Asn	Pro	Asn	Thr	Ala	Leu	Thr
			740					745					750		
Leu	Leu	Glu	Lys	Met	Lys	Asp	Thr	Ser	Lys	Lys	Asn	Asn	Ile	Phe	Ala
		755					760					765			
Gln	Phe	Arg	Lys	Asn	Asp	Arg	Asp	Lys	Gln	Lys	Leu	Ile	Glu	Thr	Val
	770					775					780				
Val	Lys	Gln	Leu	Arg	Ser	Leu	Val	Asn	Gly	Met	Ser	Gln	His	Met	
785					790					795					

<211> 455

<212> PRT

<213> Homo sapiens

<400> 3414

Met Gly Lys Leu Val Thr Arg Arg Leu Leu Gly Arg Arg Gly Ser Val

1 5 10 15

Ala Phe Pro Gly Gln Lys Gly Lys Cys Gly Val Pro Trp Arg Glu Gly
20 25 30

Arg Val Trp Arg Pro Leu Glu Arg Arg Ala Ser Val Ala Ser Pro Gly
35 40 45

Gln Lys Gly Glu Cys Gly Val Pro Trp Arg Glu Gly Pro Val Trp Arg
50 55 60

Pro Leu Glu Arg Arg Gly Ser Val Ala Ser Pro Gly Glu Lys Gly Glu
65 70 75 80

Cys Gly Val Pro Trp Arg Glu Gly Gly Val Trp Arg Pro Leu Glu Arg

85 90 95

Arg Gly Ser Val Ala Ser Pro Gly Glu Lys Gly Glu Cys Gly Val Pro 100 105 110

Trp Arg Glu Gly Gly Val Trp Arg Pro Leu Glu Arg Arg Gly Ser Val
115 120 125

Ala Ser Pro Gly Glu Lys Gly Glu Cys Gly Val Pro Trp Arg Glu Gly
130 135 140

Gly Val Trp Arg Pro Leu Glu Arg Arg Ala Ser Val Ala Ser Pro Gly
145 150 155 160

Gln Lys Gly Glu Cys Gly Val Pro Trp Arg Glu Gly Pro Val Trp Arg

165 170 175

Pro Leu Glu Arg Arg Ala Ser Val Ala Ser Pro Gly Glu Lys Gly Glu 180 185 190

Cys	Gly	Val	Pro	Trp	Arg	Glu	Gly	Gly	Val	Trp	Arg	Pro	Leu	Glu	Arg
		195					200					205			
Arg	Gly	Ser	Val	Ala	Ser	Pro	Gly	Glu	Lys	Gly	Glu	Cys	Gly	Val	Pro
	210					215					220				
Trp	Thr	Glu	Gly	Gly	Val	Trp	Arg	Pro	Leu	Glu	Arg	Arg	Ala	Ser	Val
225					230					235					240
Ala	Ser	Pro	Gly	Glu	Lys	Gly	Glu	Cys	Gly	Val	Pro	Trp	Thr	Glu	Gly
				245					250					255	
Gly	Val	Trp	Arg	Pro	Leu	Glu	Arg	Arg	Gly	Ser	Val	Ala	Ser	Pro	Gly
			260					265					270		
Glu	Lys	Gly	Gln	Cys	Gly	Val	Pro	Trp	Thr	Glu	Gly	Gly	Val	Trp	Arg
		275					280					285			
Pro	Leu	Glu	Arg	Arg	Ala	Ser	Val	Ala	Ser	Pro	Gly	Gln	Lys	Gly	Glu
	290					295					300				
Cys	Gly	Val	Pro	Trp	Arg	Glu	Gly	Arg	Val	Trp	Arg	Pro	Leu	Glu	Arg
305					310					315					320
Arg	Ala	Ser	Val	Ala	Ser	Pro	Gly	Gln	Lys	Gly	Glu	Cys	Gly	Val	Pro
				325					330					335	
Trp	Arg	Glu	Gly	Pro	Val	Trp	Arg	Pro	Leu	Glu	Arg	Arg	Gly	Ser	Val
			340					345					350		
Ala	Ser	Pro	Gly	Glu	Lys	Gly	Glu	Cys	Gly	Val	Pro	Trp	Arg	Glu	Gly
		355					360					365			
Gly	Val	Trp	Arg	Pro	Leu	Glu	Arg	Arg	Gly	Ser	Val	Ala	Ser	Pro	Gly
	370					375					380				
Glu	Lys	Gly	Glu	Cys	Gly	Val	Pro	Trp	Arg	Glu	Gly	Gly	Val	Trp	Arg
385					390					395					400
Pro	Leu	Asp	Arg	Arg	Gly	Ser	Val	Ala	Ser	Pro	Gly	Glu	Lys	Gly	Glu
				405					410					415	
Cvs	Glv	Val	Arg	Trp	Arg	Glu	Glv	Arg	Val	Trp	Tvr	Ser	Leu	Asp	Arg

420 425 430

Arg Gly Ser Val Pro Ala Ala Leu Ala Ser Gln Arg His Ala Leu Leu 435 440 445

Ala Leu Pro Gln Pro Gln Gly

450 455

<210> 3415

<211> 844

<212> PRT

<213> Homo sapiens

<400> 3415

Met Gly Phe Gln Pro Asn Thr Ala Gly Ser Glu Cys Glu Asp Val Asp

1 5 10 15

Glu Cys Glu Asn His Leu Ala Cys Pro Gly Gln Glu Cys Val Asn Ser

20 25 30

Pro Gly Ser Phe Gln Cys Arg Thr Cys Pro Ser Gly His His Leu His

35 40 45

Arg Gly Arg Cys Thr Asp Val Asp Glu Cys Ser Ser Gly Ala Pro Pro

50 55 60

Cys Gly Pro His Gly His Cys Thr Asn Thr Glu Gly Ser Phe Arg Cys

65 70 75 80

Ser Cys Ala Pro Gly Tyr Arg Ala Pro Ser Gly Arg Pro Gly Pro Cys

85 90 95

Ala Asp Val Asn Glu Cys Leu Glu Gly Asp Phe Cys Phe Pro His Gly

100 105 110

Glu Cys Leu Asn Thr Asp Gly Ser Phe Ala Cys Thr Cys Ala Pro Gly

115 120 125

Tyr	Arg	Pro	Gly	Pro	Arg	Gly	Ala	Ser	Cys	Leu	Asp	Val	Asp	Glu	Cys
	130					135					140				
Ser	Glu	Glu	Asp	Leu	Cys	Gln	Ser	Gly	Ile	Cys	Thr	Asn	Thr	Asp	Gly
145					150					155					160
Ser	Phe	Glu	Cys	Ile	Cys	Pro	Pro	Gly	His	Arg	Ala	Gly	Pro	Asp	Leu
				165					170					175	
Ala	Ser	Cys	Leu	Asp	Val	Asp	Glu	Cys	Arg	Glu	Arg	Gly	Pro	Ala	Leu
			180					185					190		
Cys	Gly	Ser	Gln	Arg	Cys	Glu	Asn	Ser	Pro	Gly	Ser	Tyr	Arg	Cys	Val
		195					200					205			
Arg	Asp	Cys	Asp	Pro	Gly	Tyr	His	Ala	Gly	Pro	Glu	Gly	Thr	Cys	Asp
	210					215					220				
Asp	Val	Asp	Glu	Cys	Gln	Glu	Tyr	Gly	Pro	Glu	Ile	Cys	Gly	Ala	Gln
225					230					235					240
Arg	Cys	Glu	Asn	Thr	Pro	Gly	Ser	Tyr	Arg	Cys	Thr	Pro	Ala	Cys	Asp
				245					250					255	
Pro	Gly	Tyr	Gln	Pro	Thr	Pro	Gly	Gly	Gly	Cys	Gln	Asp	Val	Asp	Glu
			260					265					270		
Cys	Arg	Asn	Arg	Ser	Phe	Cys	Gly	Ala	His	Ala	Val	Cys	Gln	Asn	Leu
		275					280					285			
Pro	Gly	Ser	Phe	Gln	Cys	Leu	Cys	Asp	Gln	Gly	Tyr	Glu	Gly	Ala	Arg
	290					295					300				
Asp	Gly	Arg	His	Cys	Val	Asp	Val	Asn	Glu	Cys	Glu	Thr	Leu	Gln	
305					310					315					320
Val	Cys	Gly	Ala	Ala	Leu	Cys	Glu	Asn	Val	Glu	Gly	Ser	Phe		Cys
				325					330					335	
Val	Cys	Pro		Ser	Pro	Glu	Glu		Asp	Pro	Met	Thr		Arg	Cys
			340					345		_			350	_	
Val	Pro	Pro	Ara	Thr	Ser	Ala	Glv	Thr	Phe	Pro	GV	Ser	Gln	Pro	GIn

		355					360					365			
Ala	Pro	Ala	Ser	Pro	Val	Leu	Pro	Ala	Arg	Pro	Pro	Pro	Pro	Pro	Leu
	370					375					380				
Pro	Arg	Arg	Pro	Ser	Thr	Pro	Arg	Gln	Gly	Pro	Val	Gly	Ser	Gly	Arg
385					390					395					400
Arg	Glu	Cys	Tyr	Phe	Asp	Thr	Ala	Ala	Pro	Asp	Ala	Cys	Asp	Asn	Ile
				405					410					415	
Leu	Ala	Arg	Asn	Val	Thr	Trp	Gln	Glu	Cys	Cys	Cys	Thr	Val	Gly	Glu
			420					425					430		
Gly	Trp	Gly	Ser	Gly	Cys	Arg	Ile	Gln	Gln	Cys	Pro	Gly	Thr	Glu	Thr
		435					440					445			
Ala	Glu	Tyr	Gln	Ser	Leu	Cys	Pro	His	Gly	Arg	Gly	Tyr	Leu	Ala	Pro
	450					455					460				
Ser	Gly	Asp	Leu	Ser	Leu	Arg	Arg	Asp	Val	Asp	Glu	Cys	Gln	Leu	Phe
465					470					475					480
Arg	Asp	Gln	Val	Cys	Lys	Ser	Gly	Val	Cys	Val	Asn	Thr	Ala	Pro	Gly
				485					490					495	
Tyr	Ser	Cys	Tyr	Cys	Ser	Asn	Gly	Tyr	Tyr	Tyr	His	Thr	Gln	Arg	Leu
			500					505					510		
Glu	Cys	Ile	Asp	Asn	Asp	Glu	Cys	Ala	Asp	Glu	Glu	Pro	Ala	Cys	Glu
		515					520					525			
Gly	Gly	Arg	Cys	Val	Asn	Thr	Val	Gly	Ser	Tyr	His	Cys	Thr	Cys	Glu
	530					535					540				
Pro	Pro	Leu	Val	Leu	Asp	Gly	Ser	Gln	Arg	Arg	Cys	Val	Ser	Asn	Glu
545					550					555					560
Ser	Gln	Ser	Leu	Asp	Asp	Asn	Leu	Gly	Val	Cys	Trp	Gln	Glu	Val	Gly
				565					570					575	
Ala	Asp	Leu	Val	Cys	Ser	His	Pro	Arg	Leu	Asp	Arg	Gln	Ala	Thr	Tyr
			580					585					590		

Thr	Glu	Cys	Cys	Cys	Leu	Tyr	Gly	Glu	Ala	Trp	Gly	Met	Asp	Cys	Ala
		595					600					605			
Leu	Cys	Pro	Ala	Gln	Asp	Ser	Asp	Asp	Phe	Glu	Ala	Leu	Cys	Asn	Val
	610					615					620				
Leu	Arg	Pro	Pro	Ala	Tyr	Ser	Pro	Pro	Arg	Pro	Gly	Gly	Phe	Gly	Leu
625					630					635					640
Pro	Tyr	Glu	Tyr	Gly	Pro	Asp	Leu	Gly	Pro	Pro	Tyr	Gln	Gly	Leu	Pro
				645					650					655	
Tyr	Gly	Pro	Glu	Leu	Tyr	Pro	Pro	Pro	Ala	Leu	Pro	Tyr	Asp	Pro	Tyr
			660					665					670		
Pro	Pro	Pro	Pro	Gly	Pro	Phe	Ala	Arg	Arg	Glu	Ala	Pro	Tyr	Gly	Ala
		675					680		r			685			
Pro	Arg	Phe	Asp	Met	Pro	Asp	Phe	Glu	Asp	Asp	Gly	Gly	Pro	Tyr	Gly
	690					695					700				
Glu	Ser	Glu	Ala	Pro	Ala	Pro	Pro	Gly	Pro	Gly	Thr	Arg	Trp	Pro	Tyr
705					710					715					720
Arg	Ser	Arg	Asp	Thr	Arg	Arg	Ser	Phe	Pro	Glu	Pro	Glu	Glu	Pro	Pro
				725					730					735	
Glu	Gly	Gly	Ser	Tyr	Ala	Gly	Ser	Leu	Ala	Glu	Pro	Tyr	Glu	Glu	Leu
			740					745					750		
Glu	Ala	Glu	Glu	Cys	Gly	Ile	Leu	Asp	Gly	Cys	Thr	Asn	Gly	Arg	Cys
		755					760					765			
Val	Arg	Val	Pro	Glu	Gly	Phe	Thr	Cys	Arg	Cys	Phe	Asp	Gly	Tyr	Arg
	770					775					780				
Leu	Asp	Met	Thr	Arg	Met	Ala	Cys	Val	Asp	Ile	Asn	Glu	Cys	Asp	Glu
785					790					795					800
Ala	Glu	Ala	Ala	Ser	Pro	Leu	Cys	Val	Asn	Ala	Arg	Cys	Leu	Asn	Thr
				805					810					815	
Asp	Gly	Ser	Phe	Arg	Cys	Ile	Cys	Arg	Pro	Gly	Phe	Ala	Pro	Thr	His

820 825 830

Gln Pro His His Cys Ala Pro Ala Arg Pro Arg Ala 835 840

<210> 3416

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3416

Met Ser Val Ser Met Lys Met Val Ser Leu Cys Ile Gly His Cys Arg

1 5 10 15

Gly Glu Arg Lys Glu Leu Arg Gly Pro Cys Arg Thr Gln Pro Val Gly

20 25 30

Lys Gly Leu Pro Phe Ser Pro Ala Ser Arg Ser Pro Gly Val Trp Phe

35 40 45

Pro Val Leu Asn His Leu His Gln Pro Gly Leu Cys Ser Asn Cys Gly

50 55 60

Ala Gln Arg Arg Arg Gly Pro Ala Ser Pro Pro Ser Leu His Val Gln

65 70 75 80

Val Arg Cys Leu Arg Pro Arg Glu Thr Ala Trp Ser Pro Pro Thr Val

85 90 95

Pro Thr Gly Ala Arg Pro Gln Thr Arg Ser Ser Ser Val Ser Ala Gly

100 105 110

Ser Glu Ala Val Arg Ser Phe

115

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3417

Met Thr Ser Leu Glu Met Val Ser Trp Glu Arg Ser Pro Pro Gly Gln

1 5 10 15

Arg Ile Pro Leu Thr Trp Gly Leu Thr Ser Arg Pro Gly His Phe Pro

20 25 30

Gly Pro Pro Val Leu Pro Asp Leu Ser Val Ser Val Cys Lys Met Gly

35 40 45

Ile Thr Arg Ala Ser Leu Cys Gly Pro Gly Glu Ser Gly Thr Glu Gly

50 55 60

Arg Pro Gly Val Gln Gln Gly Pro Ala Pro Thr Pro Ala Pro Pro Ser

65 70 75 80

Pro Ala Pro Ser Pro Arg Ser Cys Thr Leu His Ser Pro Cys Leu Gln

85 90 95

Ser Leu Cys Pro Val Pro Thr Pro Gly

100

<210> 3418

<211> 1576

<212> PRT

<213> Homo sapiens

<400> 3418

Met Glu Asn Ile Leu Cys Phe Leu Asn Ser Tyr Thr Glu Thr Gly Leu

1				5					10					15	
Ser	Pro	Asp	Ser	His	Trp	Leu	Asp	Ile	Asp	Pro	Asn	Phe	Ile	Cys	Leu
			20					25					30		
Ser	Gly	Leu	Gly	Leu	Phe	Ile	Leu	Tyr	Leu	Phe	Tyr	Val	Val	Leu	Thr
		35					40					45			
Leu	Tyr	Ser	Ser	Pro	Thr	Glu	Lys	Asn	Asn	Asp	Ile	Gln	Lys	His	Gln
	50					55					60				
Gly	Arg	Ala	Lys	Arg	Arg	Arg	Lys	Gly	Gly	Thr	Phe	Lys	Gly	Phe	Pro
65					70					75					80
Asp	Trp	Lys	Ser	Phe	Gln	Arg	Glu	Glu	Glu	Glu	Glu	Arg	Lys	Leu	Leu
				85					90					95	
Ser	Leu	Leu	Lys	Ser	Phe	Gly	Pro	Pro	Val	Ser	Cys	Ser	Pro	Arg	Gly
			100					105					110		
Gln	His	His	Asp	Thr	Asn	His	Phe	Arg	Arg	Leu	Leu	Cys	Pro	Asp	Pro
		115					120					125			
Val	Cys	Arg	Val	Cys	Lys	Arg	Ala	Thr	Ala	Asp	Ile	Gln	Gln	Leu	Leu
	130					135					140				
Ser	Trp	Glu	Ser	Leu	Lys	Asp	Ala	Ala	Pro	Ser	Val	Ser	Pro	Leu	Ala
145					150					155					160
Ser	Ser	Ala	Ser	Ala	Thr	Glu	Ser	Ser	Phe	Thr	Leu	Ala	Ser	Thr	Pro
				165					170					175	
Ser	Ala	Thr	Pro	Pro	Glu	Asp	Leu	Ile	Leu	Ser	Pro	Arg	Pro	Lys	Ala
			180					185					190		
Ser	Pro	Pro	Pro	Pro	Leu	Ile	Leu	Ser	Pro	Asp	Leu	Ile	Thr	Thr	Leu
		195					200					205			
Ala	Asp	Leu	Phe	Ser	Pro	Ser	Pro	Leu	Arg	Asp	Pro	Leu	Pro	Pro	Glr
	210					215					220				
Pro	Val	Ser	Pro	Leu	Asp	Ser	Lys	Phe	Pro	Ile	Asp	His	Ser	Pro	Pro
225					230					235					240

Gln	Gln	Leu	Pro	Phe	Pro	Leu	Leu	Pro	Pro	His	His	Ile	Glu	Arg	Val
				245					250					255	
Glu	Ser	Ser	Leu	Gln	Pro	Glu	Ala	Ser	Leu	Ser	Leu	Asn	Thr	Ile	Phe
			260					265					270		
Ser	Phe	Gly	Ser	Thr	Leu	Cys	Gln	Asp	Ile	Ser	Gln	Ala	Met	Asn	Pro
		275					280					285			
Ile	Asp	Ser	Cys	Ala	Arg	His	His	Gly	Pro	Pro	Ile	Pro	Ser	Ala	Leu
	290					295					300				
Pro	Pro	Glu	Asp	Cys	Thr	Val	Thr	Gln	Ser	Lys	Ser	Ser	Leu	Thr	Ile
305					310					315					320
Leu	Lys	Thr	Phe	Pro	Glu	Met	Leu	Ser	Leu	Gly	Gly	Ser	Gly	Gly	Ser
				325					330					335	
Ser	Thr	Ser	Ala	Pro	Thr	Ile	Lys	Gly	Ile	Asp	His	Ser	His	Leu	Ala
			340					345					350		
Ser	Ser	Glu	Phe	Thr	Trp	Trp	Gln	Pro	His	Ala	Lys	Asp	Ser	Phe	Ser
		355					360					365			
Ser	Asn	Phe	Val	Pro	Ser	Asp	Phe	Met	Glu	Glu	Leu	Leu	Thr	Leu	His
	370					375					380				
Ser	Ser	Glu	Ala	Phe	Leu	Gly	Gly	His	Ser	Val	Ala	Asn	Leu	Ile	Glu
385					390					395					400
Pro	Val	Asn	Ile	Ser	Phe	Leu	Ser	His	Asp	Ile	Leu	Ala	Leu	Leu	Glu
				405					410					415	
Arg	Gln	Val	Lys	Lys	Arg	Gly	Asp	Phe	Leu	Met	Trp	Lys	Glu	Asn	Gly
			420					425					430		
Lys	Lys	Pro	Gly	Ser	Phe	Pro	Lys	Gln	Leu	Arg	Pro	Asn	Tyr	Gln	Leu
		435					440					445			
Asn	Ser	Ser	Arg	Asn	Met	Leu	Thr	Ser	Ile	Ala	Val	Lys	His	Asp	Leu
	450					455					460				
Ala	Glu	Ser	Phe	Pro	Phe	Trp	Ala	Ser	Lvs	Glv	Lvs	Leu	Glu	Trn	Gln

His Ile His Gln Gln Pro Pro His Ser Lys Cys Phe Glu Asp His Leu Glu Gln Lys Tyr Val Gln Leu Phe Trp Gly Leu Pro Ser Leu His Ser Glu Ser Leu His Pro Thr Val Leu Val Gln Arg Gly His Ser Ser Met Phe Val Phe Phe Asn Gly Ile Thr Asn Thr Ser Ile Ser His Glu Ser Pro Val Leu Pro Pro Pro Gln Pro Leu Ser Leu Pro Ser Thr Gln Pro Leu Pro Leu Pro Gln Thr Leu Pro Gln Gly Gln Ser Pro His Leu Thr Gln Val Lys Ser Leu Ala Gln Pro Gln Ser Pro Phe Arg Ala Leu Leu Pro Ser Pro Leu Phe Leu Ile Arg Ile Cys Gly Val Cys Phe His Arg Pro Gln Asn Glu Ala Arg Ser Leu Leu Pro Ser Glu Ile Asn His Leu Glu Trp Asn Val Leu Gln Lys Val Gln Glu Ser Leu Trp Gly Leu Pro Ser Val Val Gln Lys Ser Gln Glu Asp Phe Cys Pro Pro Ala Pro Asn Pro Glu Leu Val Arg Lys Ser Phe Lys Val His Val Pro Ile Ser Ile Ile Pro Gly Asp Phe Pro Leu Ser Ser Glu Val Arg Lys Lys Leu Glu Gln His Ile Arg Arg Arg Leu Ile Gln Arg Arg Trp Gly Leu Pro Arg

Arg	Ile	His	Glu	Ser	Leu	Ser	Leu	Leu	Arg	Pro	Gln	Ser	Lys	Ile	Ser
705					710					715					720
Glu	Leu	Ser	Val	Ser	Glu	Arg	Ile	His	Gly	Pro	Leu	Asn	Ile	Ser	Leu
				725					730					735	
Val	Glu	Gly	Gln	Arg	Cys	Asn	Val	Leu	Lys	Lys	Ser	Ala	Ser	Ser	Phe
			740					745					750		
Pro	Arg	Ser	Phe	His	Glu	Arg	Ser	Ser	Asn	Met	Leu	Ser	Met	Glu	Asn
		755					760					765			
Val	Gly	Asn	Tyr	Gln	Gly	Tyr	Ser	Gln	Glu	Thr	Val	Pro	Lys	Asp	His
	770					775					780				
Leu	Leu	His	Gly	Pro	Glu	Thr	Ser	Ser	Asp	Lys	Asp	Leu	Arg	Ser	Asn
785					790					795					800
Ser	Glu	Arg	Asp	Leu	Glu	Thr	His	Met	Met	His	Leu	Ser	Gly	Asn	Asp
				805					810					815	
Ser	Gly	Val	Arg	Leu	Gly	Gln	Lys	Gln	Leu	Glu	Asn	Ala	Leu	Thr	Val
			820					825					830		
Arg	Leu	Ser	Lys	Lys	Phe	Glu	Glu	Ile	Asn	Glu	Gly	Arg	Met	Pro	Gly
		835					840					845			
Thr	Val	His	Ser	Ser	Trp	His	Ser	Val	Lys	Gln	Thr	Met	Ser	Leu	Pro
	850					855					860				
Glu	Lys	Ser	His	Ser	Gln	Ile	Lys	His	Arg	Asn	Leu	Val	Thr	Leu	Val
865					870					875					880
Ser	Glu	Asp	His	Cys	Val	Asp	Thr	Ser	Gln	Glu	Ile	Ser	Phe	Leu	Ser
				885					890					895	
Ser	Asn	Lys	Gln	Lys	Met	Leu	Glu	Ala	His	Ile	Lys	Thr	Phe	Arg	Met
			900					905					910		
Arg	Met	Leu	Trp	Gly	Leu	Pro	Leu	Lys	Val	Leu	Glu	Ser	Ile	Glu	Ile
		915					920					925			
Phe	Lys	Ser	Lys	Ala	Asp	Leu	Ser	Thr	Ser	Phe	Ser	His	Phe	Asp	Leu

	930					935					940				
Pro	Ser	Ser	Ala	Thr	Phe	Ile	Ser	Gln	Gly	Asp	Ser	Lys	Asp	Gly	Val
945					950					955					960
Ser	Lys	Ser	Arg	Ser	Arg	Ser	Thr	Phe	Gln	Gly	Glu	Lys	Leu	Gly	Thr
				965					970					975	
Thr	Ser	Ser	Val	Pro	Ile	Leu	Asp	Arg	Pro	His	Pro	Val	Ser	Ser	Pro
			980					985					990		
Val	Val	Gln	Glu	Gly	Gln	Gly	Thr	Leu	Arg	Arg	Gln	Phe	Ser	Asp	Thr
		995					1000				-	1005			
Asp	His	Asp	Leu	Ile	Glu	Thr	Asp	Ser	Lys	Asp	Gly	Ala	Ser	Thr	Ser
]	1010					1015					1020				
Leu	Arg	Arg	Gly	Thr	Thr	Asp	Phe	Gln	Ser	Glu	Lys	Leu	Asp	Ser	Thr
1025	5			-	1030					1035					1040
Ser	Ser	Phe	Pro	Ile	Leu	Gly	His	Ser	Tyr	Leu	Val	Thr	Ser	Pro	Val
				1045				-	1050				-	1055	
Asn	Gln	Glu	Lys	Gln	Gly	Thr	Leu	Arg	Arg	Glu	Phe	Ser	Asp	Thr	Asp
		-	1060					1065					1070		
Asn	Asp	Leu	Thr	Glu	Ser	Val	Arg	Thr	Thr	Glu	Asp	Gly	Arg	Gln	Thr
	-	1075					1080					1085			
Phe	Leu	Pro	Pro	Pro	His	Ser	Ile	Val	Asp	Glu	Val	Ser	Gln	Lys	Gln
-	1090					1095					1100				
Thr	Val	Leu	Ala	Ser	Arg	Cys	Ser	Ala	Glu	Leu	Pro	Ile	Met	Gln	Ala
1109	5				1110					1115					1120
Gly	Ala	Gly	Cys	Glu	Ser	Trp	Asp	Lys	Arg	Lys	Ser	Ser	Phe	His	Asn
				1125				,	1130					1135	
Val	Asp	Arg	Leu	Gln	Gly	Ser	Arg	Lys	Thr	Phe	Pro	Val	Thr	Asn	Ala
			1140					1145					1150		
Leu	Gln	Ser	Gln	Thr	Arg	Asn	Asn	Leu	Thr	Thr	Ser	Lys	Ser	Gly	Ser
		1155					1160					1165			

Cys Ser Leu	Thr Asn	Val Ly	s Ala	Ser	Thr	Ser	Asn	Glu	Thr	Glu	Ile
1170		117	5]	180				
Phe Pro Pro	Arg Ile	Ser Va	l Pro	Gln	Asp	Pro	Lys	Ser	Ser	Tyr	Leu
1185		1190				1195]	1200
Lys Asn Gln	Met Leu	Ser Gl	n Leu	Lys	Leu	Val	Gln	Arg	Lys	His	Ser
	1205	,			1210				1	1215	
Gln Pro Gln	Ser His	Phe Th	r Asp	Met	Ser	Phe	Ala	Leu	Asp	Asn	Leu
	1220			1225				-	1230		
Ser Ser Lys	Asp Leu	Leu Th	r Asn	Ser	Gln	Gly	Ile	Ser	Ser	Gly	Asp
1235			1240					1245			
Met Gly Thr	Ser Glr	ı Val Va	l His	Val	His	Leu	Glu	Asp	Ser	Gly	Ile
1250		125	5				1260				
Arg Val Ala	Gln Lys	Gln Gl	u Pro	Arg	Val	Pro	Thr	Cys	Val	Leu	Gln
1265		1270				1275]	1280
Lys Cys Gln	Val Thr	Asn Ph	e Pro	Pro	Ala	Val	Asn	Arg	Val	Ser	Pro
	1285	;			1290				:	1295	
Val Arg Pro	Lys Gly	Gly Gl	u Leu	Asp	Gly	Gly	Asp	Ala	Gly	Leu	Gly
	1300			1305					1310		
Thr Ser Gln	Arg Arg	g Arg Ly	s Ser	Leu	Pro	Val	His	Asn	Lys	Thr	Ser
1315			1320				-	1325			
Gly Glu Val	Leu Gly	Ser Ly	s Ser	Ser	Pro	Thr	Leu	Lys	Thr	Gln	Pro
1330		133	5				1340				
Pro Pro Glu	Asn Leu	ı Phe Ar	g Lys	Trp	Met	Lys	Thr	Ser	Leu	Gln	Trp
1345		1350				1355]	1360
Phe Asn Lys	Pro Sei	: Ile Se	r Tyr	Glu	Glu	Gln	Glu	Ser	Ser	Trp	Glu
	1365	5			1370					1375	
Lys Gly Ser	Ser Leu	ı Ser Se	r Cys	Val	Gln	Asn	Ile	Gly	Arg	Val	Ile
	1380			1385					1390		
Arg Ala Ala	Phe Thi	Gly Th	r Thr	Glu	Ala	Gln	Lys	Ile	Arg	Lys	Asp

1395 1400 1405

Thr Arg Glu Phe Leu Glu Glu Lys Leu Gly His Arg His Gly Ile Asp 1410 1415 1420

Ile Thr Cys Pro Gln Glu Pro Leu Ser Phe Pro Val Gly Leu Gly Lys 1425 1430 1435 1440

Ala Gln His Asn Pro Glu Val His Val Arg Ala Glu Pro Val Gln Gly
1445 1450 1455

Cys Pro Cys Asn Tyr Arg Ala Pro Ser Cys Lys Val Thr Arg Thr Lys

1460 1465 1470

Ser Cys Ser Gln Gln Ala Ile Phe Val Gly Gln Asn Tyr Pro Thr Arg 1475 1480 1485

Ile Arg Gln Ile Ile Asp Lys Asp Arg Gln Pro Gln Lys Val Glu Ala 1490 1495 1500

Phe Lys Gly Lys IIe Leu Cys Gln Ser His Pro Gln Ser Met Pro His 1505 1510 1515 1520

Arg Lys Pro Val Pro His Pro Asn Pro Thr Cys Arg Arg Gln Val Ser 1525 1530 1535

Leu Val Cys Pro Ala Val Pro Thr Ser Ala Lys Ser Pro Val Phe Ser 1540 1545 1550

Asp Val Pro Phe Leu Thr Gly Gln Lys Met Leu Pro Lys His Leu Gln 1555 1560 1565

Gly Gly Lys Phe Pro Pro Thr Lys 1570 1575

<210> 3419

<211> 976

<212> PRT

<213> Homo sapiens

<400)> 34	119													
Met	Gly	Asn	Leu	Glu	Ser	Ala	Glu	Gly	Val	Pro	Gly	Glu	Pro	Pro	Ser
1				5					10					15	
Val	Pro	Leu	Leu	Leu	Pro	Pro	Gly	Lys	Met	Pro	Met	Pro	Glu	Pro	Cys
			20					25					30		
Glu	Leu	Glu	Glu	Arg	Phe	Ala	Leu	Val	Leu	Ser	Ser	Met	Asn	Leu	Pro
		35					40					45			
Pro	Asp	Lys	Ala	Arg	Leu	Leu	Arg	Gln	Tyr	Asp	Asn	Glu	Lys	Lys	Trp
	50					55					60				
Asp	Leu	Ile	Cys	Asp	Gln	Glu	Arg	Phe	Gln	Val	Lys	Asn	Pro	Pro	His
65					70					75					80
Thr	Tyr	Ile	Gln	Lys	Leu	Gln	Ser	Phe	Leu	Asp	Pro	Ser	Val	Thr	Arg
				85					90					95	
Lys	Lys	Phe	Arg	Arg	Arg	Val	Gln	Glu	Ser	Thr	Lys	Val	Leu	Arg	Glu
			100					105					110		
Leu	Glu	Ile	Ser	Leu	Arg	Thr	Asn	His	Ile	Gly	Trp	Val	Arg	Glu	Phe
		115					120					125			
Leu	Asn	Asp	Glu	Asn	Lys	Gly	Leu	Asp	Val	Leu	Val	Asp	Tyr	Leu	Ser
	130					135					140				
Phe	Ala	Gln	Cys	Ser	Val	Met	Tyr	Ser	Thr	Leu	Pro	Gly	Arg	Arg	Ala
145					150					155					160
Leu	Lys	Asn	Ser	Arg	Leu	Val	Ser	Gln	Lys	Asp	Asp	Val	His	Val	Cys
				165					170					175	
Ile	Leu	Cys	Leu	Arg	Ala	Ile	Met	Asn	Tyr	Gln	Tyr	Gly	Phe	Asn	Leu
			180					185					190		
Val	Met	Ser	His	Pro	His	Ala	Val	Asn	Glu	Ile	Ala	Leu	Ser	Leu	Asn
		195					200					205			

Asn Lys Asn Pro Arg Thr Lys Ala Leu Val Leu Glu Leu Leu Ala Ala

	210					215					220				
Val	Cys	Leu	Val	Arg	Gly	Gly	His	Glu	Ile	Ile	Leu	Ala	Ala	Phe	Asp
225					230					235					240
Asn	Phe	Lys	Glu	Val	Cys	Lys	Glu	Leu	His	Arg	Phe	Glu	Lys	Leu	Met
				245					250					255	
Glu	Tyr	Phe	Arg	Asn	Glu	Asp	Ser	Asn	Ile	Asp	Phe	Met	Val	Ala	Cys
			260					265					270		
Met	Gln	Phe	Ile	Asn	Ile	Val	Val	His	Ser	Val	Glu	Asp	Met	Asn	Phe
		275					280					285			
Arg	Val	His	Leu	Gln	Tyr	Glu	Phe	Thr	Lys	Leu	Gly	Leu	Glu	Glu	Phe
	290					295					300				
Leu	Gln	Lys	Ser	Arg	His	Thr	Glu	Ser	Glu	Lys	Leu	Gln	Val	Gln	Ile
305					310					315					320
Gln	Ala	Tyr	Leu	Asp	Asn	Val	Phe	Asp	Val	Gly	Gly	Leu	Leu	Glu	Asp
				325					330					335	
Ala	Glu	Thr	Lys	Asn	Val	Ala	Leu	Glu	Lys	Val	Glu	Glu	Leu	Glu	Glu
			340					345					350		
His	Val	Ser	His	Leu	Thr	Glu	Lys	Leu	Leu	Asp	Leu	Glu	Asn	Glu	Asn
		355					360					365			
Met	Met	Arg	Val	Ala	Glu	Leu	Glu	Lys	Gln	Leu	Leu	Gln	Arg	Glu	Lys
	370					375					380				
Glu	Leu	Glu	Ser	Ile	Lys	Glu	Thr	Tyr	Glu	Asn	Thr	Ser	His	Gln	Val
385					390					395					400
His	Thr	Leu	Arg	Arg	Leu	Ile	Lys	Glu	Lys	Glu	Glu	Ala	Phe	Gln	Arg
				405					410					415	
Arg	Cys	His	Leu	Glu	Pro	Asn	Val	Arg	Gly	Leu	Glu	Ser	Val	Asp	Ser
			420					425					430		
Glu	Ala	Leu	Ala	Arg	Val	Gly	Pro	Ala	Glu	Leu	Ser	Glu	Gly	Met	Pro
		435					440					445			

Pro	Ser	Asp	Leu	Asp	Leu	Leu	Ala	Pro	Ala	Pro	Pro	Pro	Glu	Glu	Val
	450					455					460				
Leu	Pro	Leu	Pro	Pro	Pro	Pro	Ala	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Pro
465					470					475					480
Pro	Leu	Pro	Asp	Lys	Cys	Pro	Pro	Ala	Pro	Pro	Leu	Pro	Gly	Ala	Ala
				485					490					495	
Pro	Ser	Val	Val	Leu	Thr	Val	Gly	Leu	Ser	Ala	Ile	Arg	Ile	Lys	Lys
			500					505					510		
Pro	Ile	Lys	Thr	Lys	Phe	Arg	Leu	Pro	Val	Phe	Asn	Trp	Thr	Ala	Leu
		515					520					525			
Lys	Pro	Asn	Gln	Ile	Ser	Gly	Thr	Val	Phe	Ser	Glu	Leu	Asp	Asp	Glu
	530					535					540				
Lys	Ile	Leu	Glu	Asp	Leu	Asp	Leu	Asp	Lys	Phe	Glu	Glu	Leu	Phe	Lys
545					550					555					560
Thr	Lys	Ala	Gln	Gly	Pro	Ala	Leu	Asp	Leu	Ile	Cys	Ser	Lys	Asn	Lys
				565					570					575	
Thr	Ala	Gln	Lys	Ala	Ala	Ser	Lys	Val	Thr	Leu	Leu	Glu	Ala	Asn	Arg
			580					585					590		
Ala	Lys	Asn	Leu	Ala	Ile	Thr	Leu	Arg	Lys	Ala	Gly	Arg	Ser	Ala	Glu
		595					600					605			
Glu	Ile	Cys	Arg	Ala	Ile	His	Thr	Phe	Asp	Leu	Gln	Thr	Leu	Pro	Val
	610					615					620				
Asp	Phe	Val	Glu	Cys	Leu	Met	Arg	Phe	Leu	Pro	Thr	Glu	Ala	Glu	Val
625					630					635					640
Lys	Leu	Leu	Arg	Gln	Tyr	Glu	Arg	Glu	Arg	Gln	Pro	Leu	Glu	Glu	Leu
				645					650					655	
Ala	Ala	Glu	Asp	Arg	Phe	Met	Leu	Leu	Phe	Ser	Lys	Val	Glu	Arg	Leu
			660					665					670		
Thr	Cln	Ara	Mot	Δla	Clar	Mot	Ala	Phe	Len	$G1_{37}$	Asn	Phe	Gln	Asn	Asr

675	680)	685
Leu Gln Met Leu	Thr Pro Gln Leu	ı Asn Ala Ile Ile	Ala Ala Ser Ala
690	695	700	
Ser Val Lys Ser	Ser Gln Lys Leu	ı Lys Gln Met Leu	Glu Ile Ile Leu
705	710	715	720
Ala Leu Gly Asn	Tyr Met Asn Ser	Ser Lys Arg Gly	Ala Val Tyr Gly
	725	730	735
Phe Lys Leu Gln	Ser Leu Asp Leu	ı Leu Leu Asp Thr	Lys Ser Thr Asp
740		745	750
Arg Lys Met Thr	Leu Leu His Phe	e Ile Ala Leu Thr	Val Lys Glu Lys
755	760)	765
Tyr Pro Asp Leu	Ala Asn Phe Trr	His Glu Leu His	Phe Val Glu Lys
770	775	780	
Ala Ala Ala Val	Ser Leu Glu Asr	n Val Leu Leu Asp	Val Lys Glu Leu
785	790	795	800
Gly Arg Gly Met	Glu Leu Ile Arg	g Arg Glu Cys Ser	Ile His Asp Asn
	805	810	815
Ser Val Leu Arg	Asn Phe Leu Sei	Thr Asn Glu Gly	Lys Leu Asp Lys
820		825	830
Leu Gln Arg Asp	Ala Lys Thr Ala	a Glu Glu Ala Tyr	Asn Ala Val Val
835	840)	845
Arg Tyr Phe Gly	Glu Ser Pro Lys	s Thr Thr Pro Pro	Ser Val Phe Phe
850	855	860	
Pro Val Phe Val	Arg Phe Ile Arg	g Ser Tyr Lys Glu	Ala Glu Gln Glu
865	870	875	880
Asn Glu Ala Arg	Lys Lys Gln Glu	ı Glu Val Met Arg	Glu Lys Gln Leu
	885	890	895
Ala Gln Glu Ala	Lys Lys Leu Ası	o Ala Lys Thr Pro	Ser Gln Arg Asn
900		905	910

Lys Trp Gln Gln Gln Glu Leu Ile Ala Glu Leu Arg Arg Gln Ala
915

Lys Glu His Arg Pro Val Tyr Glu Gly Lys Asp Gly Thr Ile Glu Asp
930

Ile Ile Thr Gly Leu His Cys Gln Pro Met Val Val Arg His Gln Ala
945

Ser Ala Ala Pro Pro Ser Gly Pro Pro Arg Ala Pro Gly Pro His

970

975

<210> 3420

<211> 149

<212> PRT

<213> Homo sapiens

965

<400> 3420

Met Glu Arg Ile Glu Gly Ala Ser Val Gly Arg Cys Ala Ala Ser Pro 1 5 10 15

Tyr Leu Arg Pro Leu Thr Leu His Tyr Arg Gln Asn Gly Ala Gln Lys
20 25 30

Ser Trp Asp Phe Met Lys Thr His Asp Ser Val Thr Val Leu Leu Phe 35 40 45

Asn Ser Ser Arg Arg Ser Leu Val Leu Val Lys Gln Phe Arg Pro Ala 50 55 60

Val Tyr Ala Gly Glu Val Glu Arg Arg Phe Pro Gly Ser Leu Ala Ala 65 70 75 80

Val Asp Gln Asp Gly Pro Arg Glu Leu Gln Pro Ala Leu Pro Gly Ser 85 90 95

Ala Gly Val Thr Val Glu Leu Cys Ala Gly Leu Val Asp Gln Pro Gly

Leu Ser Leu Glu Glu Val Ala Cys Lys Glu Ala Trp Glu Glu Cys Gly Tyr His Leu Ala Pro Ser Asp Leu Arg Arg Val Ala Thr Tyr Trp Asp Ala Thr Met Gly Ser <210> 3421 <211> 161 <212> PRT <213> Homo sapiens <400> 3421 Met Tyr Pro Phe Gly Ile Phe Phe Phe Ser Phe Phe Leu Ser Ser Arg Thr His Val Ser Ile Tyr Phe Ser Glu Asn Met Leu Val Lys Ile Leu His Ala Phe Val Ser Leu Glu Met Ser Leu Phe Cys Leu Leu Val Trp Arg Val Ser Phe Phe Leu Ser Phe Phe Pro Ser Phe Ser Leu Ser Leu Ser Ser Ser Leu Pro Pro Leu Ser Phe Phe Leu Phe Leu Ser Phe Ser Phe Phe Phe Pro Phe Leu Ser Phe Phe Leu Ser Phe Phe Phe

Phe Pro Ser Phe Phe Leu Phe Ser Phe Leu Leu Ser Leu Phe Pro Ser

<210> 3422

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3422

Met Met Val Lys Gly Ser Ile Gln Gln Glu Asn Leu Thr Ile Leu Asn

1 5 10 15

Ile Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Lys Gln Ala Arg
20 25 30

Lys Asp Leu Gln Arg Asp Thr Leu Ser His Ser Asn Ser Gly Arg Leu
35 40 45

Gln His Pro Thr Asp Ser Ile Arg Ser Leu Arg Gln Lys Ile Asn Lys
50 55 60

Asp Ile Gln Asp Leu Asn Ser Ala Leu Asp Gln Met Asp Leu Ile Asp 65 70 75 80

Leu Tyr Arg Ser Leu His Pro Lys Thr Thr Glu His Thr Phe Phe Ser 85 90 95

Leu Pro His Gly Thr Tyr Ser Gln Ile Asp His Ile Ile Gly His Lys

100 105 110

Thr Ser Ser Thr Tyr Val Lys Glu Leu Lys Ser Tyr Gln Thr Tyr Ser

115 120 125

Arg Phe Thr Ala Gln 130

<210> 3423

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3423

Met Pro Gly Ala Ile Asp Asp His Cys Pro Ala Gln Pro Gly Glu Glu

1 5 10 15

Gly Thr Ala Phe Asn Val Thr Met Gly Tyr Lys Tyr Pro Pro Leu Cys
20 25 30

Leu Gly His Ala Thr Arg Cys Ile His Leu Glu Thr Gln Val Trp Ala
35 40 45

Ala Tyr Leu Leu Glu Arg Leu Ala Thr Gly Lys Trp Gly His Leu Val
50 55 60

Ser Gly Leu Ser Leu Cys Pro Leu Arg Gln Met Lys Arg Gly Val Ile
65 70 75 80

Gly Asp Thr Pro Tyr Phe Gln Tyr Lys Pro Val Gly Lys Leu Cys Pro 85 90 95

Lys Asn Phe Glu Gly Pro Ser Lys Thr Leu Ile Trp Gly Asp Cys Val 100 105 110

Asn Ser His Ala Val Val Leu Lys Asn Asp Ser Tyr Ala Leu Val Ile 115 120 125 Asp Trp Ala Pro Lys Gly Tyr Leu Lys Asn Thr Cys Ser Ser Gly Gly 130 135 140 Gly Glu Phe Leu Glu Ala Thr Tyr Phe Ile Ser Tyr Trp Glu Asp Glu 150 155 160 145 Asp His His Pro Thr Leu His Arg Trp Phe Gly Ser Phe Phe Thr Leu 170 165 175 Lys Trp Glu Asp Lys Asp Ile Thr Leu His Pro Gln Gly Leu Val 185 190 180

<210> 3424

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3424

Met Ala Met Cys Gly Ser Cys Pro Cys Pro Met Arg Pro Thr Asp Phe

1 5 10 15

Leu Gly Tyr Gly Ala Pro Val Pro Gly Arg Pro Trp Pro Trp Arg Ala
20 25 30

Ser Pro Ala Val Gln Arg Gln Pro Leu Ser Ser Cys Thr Ala Ser Ala 35 40 45

Ser Leu His Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln Arg Leu 50 55 60

Gly Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser Thr Cys
65 70 75 80

Thr Ala Ser Ala Ser Leu His Leu His Ser Gly Trp Glu Gln Gln Pro 85 90 95

Leu His Arg His Ser Gly Ser Leu Ser Pro Pro Ala Gln Arg Gln Pro

Leu Ser Thr Cys Thr Ala Ser Ala Ser Leu His Leu His Ser Gly Trp Glu Gln Gln Ser Leu His Leu His Ser Gly Ser Leu Ser Pro Pro Ala Gln Arg Gln Pro Leu His Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln Trp Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser Thr Cys Thr Ala Ser Ala Ser Leu His Leu His Ser Gly Trp Glu Gln Gln Pro Leu His Arg His Ser Gly Ser Leu Ser Pro Pro Ala Arg Gln Gln Pro Leu His Arg His Ser Gly Ser Leu Ser Pro Pro Ala Arg Trp Gln Pro Leu Ser Thr Cys Thr Ala Ala Gly Ser Ser Ser Leu Ser Thr Cys Thr Thr Ala Ala Ser Leu His Leu His Ser Ser Trp Glu Gln Gln Pro Arg Arg Val Ala Ala Lys Met Glu Phe Pro His Val Met Ser Gly Gln His Pro Pro His Thr Ala Gln Ser Ala Gly Leu Trp

<210> 3425

<211> 229

<212> PRT

<213> Homo sapiens

<400	0> 34	125													
Met	Arg	Leu	Glu	Thr	Ala	Glu	Ala	Tyr	Val	Gly	Pro	Gly	Gly	Pro	Glu
1				5					10					15	
Cys	Pro	Met	Arg	Thr	Pro	Gln	Leu	Ala	Leu	Leu	Gln	Val	Phe	Phe	Leu
			20					25					30		
Val	Phe	Pro	Asp	Gly	Val	Arg	Pro	Gln	Pro	Ser	Ser	Ser	Pro	Ser	Gly
		35					40					45			
Ala	Val	Pro	Thr	Ser	Leu	Glu	Leu	Gln	Arg	Gly	Thr	Asp	Gly	Gly	Thr
	50					55					60				
Leu	Gln	Ser	Pro	Ser	Glu	Ala	Thr	Ala	Thr	Arg	Pro	Ala	Val	Pro	Gly
65					70					75					80
Leu	Pro	Thr	Val	Val	Pro	Thr	Leu	Val	Thr	Pro	Ser	Ala	Pro	Gly	Asn
				85					90					95	
Arg	Thr	Val	Asp	Leu	Phe	Pro	Val	Leu	Pro	Ile	Cys	Val	Cys	Asp	Leu
			100					105					110		
Thr	Pro	Gly	Ala	Cys	Asp	Ile	Asn	Cys	Cys	Cys	Asp	Arg	Asp	Cys	Tyr
		115					120					125			
Leu	Leu	His	Pro	Arg	Thr	Val	Phe	Ser	Phe	Cys	Leu	Pro	Gly	Ser	Val
	130					135					140				
Arg	Ser	Ser	Ser	Trp	Val	Cys	Val	Asp	Asn	Ser	Val	Ile	Phe	Arg	Ser
145					150					155					160
Asn	Ser	Pro	Phe	Pro	Ser	Arg	Val	Phe	Met	Asp	Ser	Asn	Gly	Ile	Arg
				165					170					175	
Gln	Phe	Cys	Val	His	Val	Asn	Asn	Ser	Asn	Leu	Asn	Tyr	Phe	Gln	Lys
			180					185					190		
Leu	Gln	Lys	Val	Asn	Ala	Thr	Asn	Phe	Gln	Ala	Leu	Ala	Ala	Glu	Phe
		195					200					205			

Gly Gly Glu Ser Phe Thr Ser Thr Phe Gln Thr Gln Ser Pro Pro Ser

220

210 215

Phe Tyr Arg Val Ser

225

<210> 3426

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3426

Met Tyr Cys Leu Ile Pro Glu His Gly Arg Lys Ala Gly Ser Leu Leu

1 5 10 15

Gly Met Leu Phe Ser Gly Gly Gln Ala Lys Leu Trp Gly Thr Ala Ser

20 25 30

Glu Ser Leu Cys Ser Gln Ser Ala Ala Asp Thr Cys Arg Gln Ser Pro

35 40 45

Leu Leu Gln Asp Val Pro Leu His Gly Glu Leu Pro Glu Ala Glu Lys

50 55 60

Gly Ala Thr Asp Leu Lys Ala Ala Gln Arg Arg Val Leu Pro Lys Ala

65 70 75 80

Gln Gly Asp Arg Cys Leu Val Ser Ala Gly Val Tyr Ser Lys Pro Lys

85 90 95

Gly Ser Pro Val Ser Lys Trp

100

<210> 3427

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3427

Met Ser Leu Leu Pro Thr Thr Cys Leu Ser Pro Thr Gly Arg Arg Cys

1 5 10 15

Gly Ser Cys Gln Lys Thr Pro Glu Pro Val Ile Lys Ala Lys Asp Leu

20 25 30

Ser Ala Gln Gln Val Pro Ala Ser Leu Asn Lys Thr Ser Leu Lys Glu

35 40 45

Ile Ser Gly Glu Arg Leu Ser Ser Ile Pro Glu Ala Ser Glu Tyr Asp

50 55 60

Trp Arg Asn Tyr Gln Pro Ser Gln Met Ser Glu Ser Glu Leu Gln Met

65 70 75 80

Leu Ala Ser Leu Arg Trp Gln Gln Asn Glu Glu Leu Glu Asp Ala Gly

85 90 95

Thr Ser His Gly Leu Ser Ala Ser Gln Val Asp Asn Cys Asn Val Ser

100 105 110

Ile Ser Thr Ser Ser Asp Asp Thr Thr Thr Trp Asn Ser Cys Leu Pro

115 120 125

Pro Pro Val Asn Gln Gly Arg His Tyr Gln Lys Glu Met Asn Pro Pro

130 135 140

Ser Pro Ser Asn Pro Arg Asp Trp Leu Asn Met Leu Ser Pro Pro Ile

145 150 155 160

Val Pro Pro Ser Gln Gln Pro Ala Glu Gln Arg Pro Asp Ser Cys Glu

165 170 175

Ser Leu Ser Val Gln Gly

180

<210> 3428 <211> 148 <212> PRT <213> Homo sapiens <400> 3428 Met Asn Phe Thr Leu Met Val Ala Met Glu His Thr Thr Met Ala Ser Ala Thr Pro Ala Pro Trp Pro His Arg Ser Gln Arg Cys Arg Gln Ala Val Pro Gly His Pro Ala Ser Gly Cys Cys Gly Thr Gly Thr Phe Arg Thr Gln Arg Arg Pro Gly Asp Lys Ser Arg Arg Ala Gly Ser Arg Gly Arg Gly Ala Gly Pro Gly Arg His Asp Arg Asp Ser Ala His Ala Gly Ser Met Arg Gly Ala Arg Leu Val Pro Ala Leu Val Arg Leu Gln Leu Arg Pro Pro Ala Leu Arg Gly Glu Arg Thr Pro Ile Ser Met Pro Pro Ala Arg Pro Pro Ala Gly Val Ala Phe Pro Gly Ala Ser Ala Gly Pro Ser Arg Thr Arg Arg Gly Val Ala Thr Ala Gly Gly Arg Arg Ala

Pro Ala Val Ile

出証特2004-3059661

<210> 3429

<211> 547

<212> PRT

<213> Homo sapiens

<400> 3429

Met Gly Gly Cys Ile Pro Phe Leu Lys Ala Ala Arg Ala Leu Cys Pro

1 5 10 15

Arg Ile Met Pro Pro Leu Leu Leu Leu Ser Ala Phe Ile Phe Leu Val 20 25 30

Ser Val Leu Gly Gly Ala Pro Gly His Asn Pro Asp Arg Arg Thr Lys

35 40 45

Met Val Ser Ile His Ser Leu Ser Glu Leu Glu Arg Leu Lys Leu Gln 50 55 60

Glu Thr Ala Tyr His Glu Leu Val Ala Arg His Phe Leu Ser Glu Phe
65 70 75 80

Lys Pro Asp Arg Ala Leu Pro Ile Asp Arg Pro Asn Thr Leu Asp Lys

85 90 95

Trp Phe Leu Ile Leu Arg Gly Gln Gln Arg Ala Val Ser His Lys Thr
100 105 110

Phe Gly Ile Ser Leu Glu Glu Val Leu Val Asn Glu Phe Thr Arg Arg 115 120 125

Lys His Leu Glu Leu Thr Ala Thr Met Gln Val Glu Glu Ala Thr Gly
130 135 140

Gln Ala Ala Gly Arg Arg Gly Asn Val Val Arg Arg Val Phe Gly
145 150 155 160

Arg Ile Arg Arg Phe Phe Ser Arg Arg Arg Asn Glu Pro Thr Leu Pro
165 170 175

Arg Glu Phe Thr Arg Arg Gly Arg Arg Gly Ala Val Ser Val Asp Ser

			180					185					190		
Leu	Ala	Glu	Leu	Glu	Asp	Gly	Ala	Leu	Leu	Leu	Gln	Thr	Leu	Gln	Leu
		195					200					205			
Ser	Lys	Ile	Ser	Phe	Pro	Ile	Gly	Gln	Arg	Leu	Leu	Gly	Ser	Lys	Arg
	210					215					220				
Lys	Met	Ser	Leu	Asn	Pro	Ile	Ala	Lys	Gln	Ile	Pro	Gln	Val	Val	Glu
225					230					235					240
Ala	Cys	Cys	Gln	Phe	Ile	Glu	Lys	His	Gly	Leu	Ser	Ala	Val	Gly	Ile
				245					250					255	
Phe	Thr	Leu	Glu	Tyr	Ser	Val	Gln	Arg	Val	Arg	Gln	Leu	Arg	Glu	Glu
			260					265					270		
Phe	Asp	Gln	Gly	Leu	Asp	Val	Val	Leu	Asp	Asp	Asn	Gln	Asn	Val	His
		275					280					285			
Asp	Val	Ala	Ala	Leu	Leu	Lys	Glu	Phe	Phe	Arg	Asp	Met	Lys	Asp	Ser
	290					295	-				300				
Leu	Leu	Pro	Asp	Asp	Leu	Tyr	Met	Ser	Phe	Leu	Leu	Thr	Ala	Thr	Leu
305					310					315					320
Lys	Pro	Gln	Asp	Gln	Leu	Ser	Ala	Leu	Gln	Leu	Leu	Val	Tyr	Leu	Met
				325					330					335	
Pro	Pro	Cys	His	Ser	Asp	Thr	Leu	Glu	Arg	Leu	Leu	Lys	Ala	Leu	His
			340					345					350		
Lys	Ile	Thr	Glu	Asn	Cys	Glu	Asp	Ser	Ile	Gly	Ile	Asp	Gly	Gln	Leu
		355					360					365			
Val	Pro	Gly	Asn	Arg	Met	Thr	Ser	Thr	Asn	Leu	Ala	Leu	Val	Phe	Gly
	370					375					380				
Ser	Ala	Leu	Leu	Lys	Lys	Gly	Lys	Phe	Gly	Lys	Arg	Glu	Ser	Arg	Lys
385					390					395					400
Thr	Lys	Leu	Gly	Ile	Asp	His	Tyr	Val	Ala	Ser	Val	Asn	Val	Val	Arg
				405					410					415	

Ala Met Ile Asp Asn Trp Asp Val Leu Phe Gln Val Pro Pro His Ile Gln Arg Gln Val Ala Lys Arg Val Trp Lys Ser Ser Pro Glu Ala Leu Asp Phe Ile Arg Arg Arg Asn Leu Arg Lys Ile Gln Ser Ala Arg Ile Lys Met Glu Glu Asp Ala Leu Leu Ser Asp Pro Val Glu Thr Ser Ala Glu Ala Arg Ala Ala Val Leu Ala Gln Ser Lys Pro Ser Asp Glu Gly Ser Ser Glu Glu Pro Ala Val Pro Ser Gly Thr Ala Arg Ser His Asp Asp Glu Glu Gly Ala Gly Asn Pro Pro Ile Pro Glu Gln Asp Arg Pro Leu Leu Arg Val Pro Arg Glu Lys Glu Ala Lys Thr Gly Val Ser Tyr Phe Phe Pro <210> 3430 <211> 120

<212> PRT

<213> Homo sapiens

<400> 3430

Met Arg Arg Gly Gly Ser Leu Gly Ala Gln Asn Gln Ala Asp Gly Ala Gly Cys Arg Asn Lys Val Lys Thr Ile Leu Ile Ala Asn Ser Cys Leu

Arg Arg Lys His Pro Ser Asn Leu Arg Gly Gly Ala Leu Pro Gly His Pro Ser Val Pro Glu Ser Pro Pro Arg Pro Glu Leu Ser Gly Ser Tyr Arg Arg Gly Gln Leu Phe Pro Ser Lys Leu Glu Ser Arg Pro Arg Phe Pro Arg Ile Met Lys Gly Thr Ala Phe Phe Asp Leu Asp Phe Arg Pro Asp Pro Pro Leu Ser Arg Ser Pro Thr Phe Ser Ala Gly Cys Asn Ser Val Gly Thr Ala Pro Leu Phe <210> 3431 <211> 1047 <212> PRT <213> Homo sapiens <400> 3431 Met Ala Glu Lys Arg Pro Leu Arg Thr Leu Gly Pro Val Met Tyr Gly Lys Leu Pro Arg Leu Glu Thr Asp Ser Gly Leu Glu His Ser Leu Pro His Ser Val Gly Asn Gln Asp Pro Cys Thr Tyr Lys Gly Ser Tyr Phe

Ser Cys Pro Met Ala Gly Thr Pro Lys Ala Glu Ser Glu Gln Leu Ala

Ser	Trp	Thr	Pro	Tyr	Pro	Pro	Leu	Tyr	Ser	Thr	Gly	Met	Ala	Gly	Pro
65					70					75					80
Pro	Leu	Gln	Ala	Asp	Asn	Leu	Leu	Thr	Asn	Cys	Leu	Phe	Tyr	Arg	Ser
				85					90					95	
Pro	Ala	Glu	Gly	Pro	Glu	Lys	Met	Gln	Asp	Ser	Ser	Pro	Val	Glu	Leu
			100					105					110		
Leu	Pro	Phe	Ser	Pro	Gln	Pro	His	Ser	Tyr	Pro	Gly	Pro	Pro	Leu	Ala
		115					120					125			
Ala	Pro	Lys	Pro	Val	Tyr	Arg	Asn	Pro	Leu	Cys	Tyr	Gly	Leu	Ser	Thr
	130					135					140				
Cys	Leu	Gly	Glu	Gly	Ala	Val	Lys	Arg	Pro	Leu	Asp	Val	Asp	Trp	Thr
145					150					155					160
Leu	Ala	Thr	Gly	Pro	Leu	Leu	Pro	Ser	Ala	Asp	Pro	Pro	Cys	Ser	Leu
				165					170					175	
Ala	Pro	Ala	Pro	Ser	Lys	Gly	Gln	Thr	Leu	Asp	Gly	Thr	Phe	Leu	Arg
			180					185					190		
Gly	Val	Pro	Ala	Glu	Gly	Ser	Ser	Lys	Asp	Ser	Ser	Gly	Ser	Phe	Ser
		195					200					205			
Pro	Cys	Gln	Pro	Phe	Leu	Glu	Lys	Tyr	Gln	Thr	Ile	His	Ser	Thr	Gly
	210					215					220				
Phe	Leu	Ala	Ser	Arg	Tyr	Thr	Gly	Pro	Tyr	Pro	Arg	Asn	Ser	Lys	Gln
225					230					235					240
Ala	Met	Ser	Glu	Gly	Pro	Ser	Ser	Pro	Trp	Thr	Gln	Leu	Ala	Gln	Pro
				245					250					255	
Leu	Gly	Pro	Pro	Cys	Gln	Asp	Thr	Gly	Pro	Thr	His	Tyr	Pro	Pro	Pro
			260					265					270		
His	His	Pro	Pro	Pro	His	Pro	Pro	Gln	Ala	Leu	Pro	Cys	Pro	Pro	Ala
		275		•			280					285			
Cvs	Arg	His	Pro	Glu	Lvs	Gln	Glv	Ser	Tvr	Ser	Pro	Ala	Leu	Pro	Leu

		290					295					300				
G	ln	Pro	Leu	Gly	Gly	His	Lys	Gly	Thr	Gly	Tyr	Gln	Ala	Gly	Gly	Leu
3	05					310					315					320
G	ly	Ser	Pro	Tyr	Leu	Arg	Gln	Gln	Ala	Ala	Gln	Ala	Pro	Tyr	Ile	Pro
					325					330					335	
P	ro	Leu	Gly	Leu	Asp	Ala	Tyr	Pro	Tyr	Pro	Ser	Ala	Pro	Leu	Pro	Ala
				340					345					350		
P	ro	Ser	Pro	Gly	Leu	Lys	Leu	Glu	Pro	Pro	Leu	Thr	Pro	Arg	Cys	Pro
			355					360					365			
L	eu	Asp	Phe	Ala	Pro	Gln	Thr	Leu	Ser	Phe	Pro	Tyr	Ala	Arg	Asp	Asp
		370					375					380				
L	eu	Ser	Leu	Tyr	Gly	Ala	Ser	Pro	Gly	Leu	Gly	Gly	Thr	Pro	Pro	Ser
3	85					390					395					400
G	ln	Asn	Asn	Val	Arg	Ala	Val	Pro	Gln	Pro	Gly	Ala	Phe	Gln	Arg	Ala
					405					410					415	
C	ys	Gln	Pro	Leu	Pro	Ala	Ser	Gln	Pro	Cys	Ser	Glu	Pro	Val	Arg	Pro
				420					425					430		
A	la	Gln	Glu	Ala	Glu	Glu	Lys	Thr	Trp	Leu	Pro	Ser	Cys	Arg	Lys	Glu
			435					440					445			
L	ys	Leu	Gln	Pro	Arg	Leu	Ser	Glu	His	Ser	Gly	Pro	Pro	Ile	Val	Ιlϵ
		450					455					460				
A	rg	Asp	Ser	Pro	Val	Pro	Cys	Thr	Pro	Pro	Ala	Leu	Pro	Pro	Cys	Ala
4	65					470					475					480
A	rg	Glu	Cys	Gln	Ser	Leu	Pro	Gln	Lys	Glu	Asp	Ala	Arg	Pro	Pro	Sei
					485					490					495	
S	er	Pro	Pro	Met	Pro	Val	Ile	Asp	Asn	Val	Phe	Ser	Leu	Ala	Pro	Tyr
				500					505					510		
A	rg	Asp	Tyr	Leu	Asp	Val	Pro	Ala	Pro	Glu	Ala	Thr	Thr	Glu	Pro	Asp
			515					520					525			

Ser	Ala	Thr	Ala	Glu	Pro	Asp	Ser	Ala	Pro	Ala	lhr	Ser	Glu	Gly	GIn
	530					535					540				
Asp	Lys	Gly	Cys	Arg	Gly	Thr	Leu	Pro	Ala	Gln	Glu	Gly	Pro	Ser	Gly
545					550					555					560
Ser	Lys	Pro	Leu	Arg	Gly	Ser	Leu	Lys	Glu	Glu	Val	Ala	Leu	Asp	Leu
				565					570					575	
Ser	Val	Arg	Lys	Pro	Thr	Ala	Glu	Ala	Ser	Pro	Val	Lys	Ala	Ser	Arg
			580					585					590		
Ser	Val	Glu	His	Ala	Lys	Pro	Thr	Ala	Ala	Met	Asp	Val	Pro	Asp	Val
		595					600					605			
Gly	Asn	Met	Val	Ser	Asp	Leu	Pro	Gly	Leu	Lys	Lys	Ile	Asp	Thr	Glu
	610					615					620				
Ala	Pro	Gly	Leu	Pro	Gly	Val	Pro	Val	Thr	Thr	Asp	Ala	Met	Pro	Arg
625					630					635					640
Thr	Asn	Phe	His	Ser	Ser	Val	Ala	Phe	Met	Phe	Arg	Lys	Phe	Lys	Ile
				645					650					655	
Leu	Arg	Pro	Ala	Pro	Leu	Pro	Ala	Ala	Val	Val	Pro	Ser	Thr	Pro	Thr
			660					665					670		
Ser	Ala	Pro	Ala	Pro	Thr	Gln	Pro	Ala	Pro	Thr	Pro	Thr	Ser	Gly	Pro
		675					680					685			
Ile	Gly	Leu	Arg	Ile	Leu	Ala	Gln	Gln	Pro	Leu	Ser	Val	Thr	Cys	Phe
	690					695					700				
Ser	Leu	Ala	Leu	Pro	Ser	Pro	Pro	Ala	Val	Ala	Val	Ala	Ser	Pro	Ala
705					710					715					720
Pro	Ala	Pro	Ala	Pro	Ser	Pro	Ala	Pro	Ala	Arg	Ala	Gln	Ala		Ala
				725					730					735	
Ser	Ala	Arg	Asp	Pro	Ala	Pro	Ala	Pro	Ala	Pro	Val	Ala	Gly	Pro	Ala
			740					745					750		
Pro	Ala	Ser	Thr	Ser	Ala	Pro	Gly	Asp	Ser	Leu	Glu	Gln	His	Phe	Thr

		755					760					765			
Gly	Leu	His	Ala	Ser	Leu	Cys	Asp	Ala	Ile	Ser	Gly	Ser	Val	Ala	His
	770					775					780				
Ser	Pro	Pro	Glu	Lys	Leu	Arg	Glu	Trp	Leu	Glu	Thr	Ala	Gly	Pro	Trp
785					790					795					800
Gly	Gln	Ala	Ala	Trp	Gln	Asp	Cys	Gln	Gly	Val	Gln	Gly	Leu	Leu	Ala
				805					810					815	
Lys	Leu	Leu	Ser	Gln	Leu	Gln	Arg	Phe	Asp	Arg	Thr	His	Arg	Cys	Pro
			820					825					830		
Phe	Pro	His	Val	Val	Arg	Ala	Gly	Ala	Ile	Phe	Val	Pro	Ile	His	Leu
		835					840					845			
Val	Lys	Glu	Arg	Leu	Phe	Pro	Arg	Leu	Pro	Pro	Ala	Ser	Val	Asp	His
	850					855					860				
Val	Leu	Gln	Glu	His	Arg	Val	Glu	Leu	Arg	Pro	Thr	Thr	Leu	Ser	Glu
865					870					875					880
Glu	Arg	Ala	Leu	Arg	Glu	Leu	Ala	Leu	Pro	Gly	Cys	Thr	Ser	Arg	Met
				885					890					895	
Leu	Lys	Leu	Leu	Ala	Leu	Arg	Gln	Leu	Pro	Asp	Ile	Tyr	Pro	Asp	Leu
			900					905					910		
Pro	Gly	Leu	Gln	Trp	Arg	Asp	Cys	Val	Arg	Arg	Gln	Leu	Gly	Asp	Phe
		915					920					925			
Asp	Thr	Glu	Ala	Gly	Ala	Val	Ser	Ser	Ser	Glu	Pro	Thr	Val	Ala	Arg
	930					935					940				
Asp	Glu	Pro	Glu	Ser	Leu	Ala	Leu	Ala	Gln	Lys	Ser	Pro	Ala	Pro	Lys
945					950					955					960
Val	Arg	Lys	Pro	Gly	Arg	Lys	Pro	Pro	Thr	Pro	Gly	Pro	Glu	Lys	Ala
				965					970					975	
Glu	Ala	Ala	Ala	Gly	Glu	Glu	Ser	Cys	Gly	Ala	Ser	Pro	Thr	Pro	Ala
			980					985					990		

Thr Ser Ala Ser Pro Pro Gly Pro Thr Leu Lys Ala Arg Phe Arg Ser
995 1000 1005

Leu Leu Glu Thr Ala Trp Leu Asn Gly Leu Ala Leu Pro Thr Trp Gly
1010 1015 1020

His Lys Ser Ser Arg Pro Asp Gln Pro Ser Pro Cys Pro Gln Leu Leu
1025 1030 1035 1040

Asp Ser Gln Ser His His Leu
1045

<210> 3432

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3432

Met Thr Val Pro Thr Pro Gly Trp Thr Gly Gly Cys Glu Met Asp Gln
1 5 10 15

Gly Ala Leu Gly Gln Ala Thr Ile His Ala Trp Pro Leu Pro Pro Ser 20 25 30

Gly Ser Pro Ser Ser Pro Arg Pro Leu Gly Pro Gly Thr Leu Gly
35 40 45

Thr Ser Arg Val Gly His Pro Ala Gly Pro Leu Cys His Trp Val Ala 50 55 60

Ala Gly Arg Ser Arg Ala Val Cys Ser Gly Thr Val Glu Asp Leu Gly
65 70 75 80

Ser Ala Pro Ser Cys Val Ala Val Ala Val Ser Pro Ser Pro Arg Val

Thr Thr Arg Ala Gln Asp Ser Glu Gly Pro Ala Gln Thr Pro Gln Phe

Pro Ser Phe Gln Glu Trp Arg Glu Ala Gln Glu Tyr Val
115 120 125

<210> 3433

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3433

Met Leu Leu Val His Phe His Ile Pro Pro Val His Leu Ala Pro Pro 1 5 10 15

Phe Lys Phe Leu Glu Asp Ser Ser Ser Arg Ile Ser Lys Ser Thr Asn
20 25 30

Val Phe Asp Leu Ser Asp Lys Cys Ile Glu Lys Met Leu Thr Tyr Ala
35 40 45

Val Leu Pro Leu Cys Phe Gly Tyr His Lys Gly Lys Gly Cys Leu Ser
50 55 60

Arg Gly Gln Val Thr Cys Leu Thr Leu Ser Ile Thr Trp Asp Asp Ser
65 70 75 80

Leu Ser Leu Pro Cys Pro Phe Ala Leu Tyr Thr Ile Asn Ser Asn Ala 85 90 95

Ser Arg His Ser Gly Pro Ser Cys Leu Ser Tyr Cys Leu Cys Leu Val 100 105 110

Ser Tyr Phe Pro Met Ile Ser Cys Leu His Thr 115 120 <210> 3434

<211> 766

<212> PRT

<213> Homo sapiens

<400> 3434

Met Thr Trp Ala His Ala Arg Leu Cys Phe Leu Leu Gly Arg Leu Ser

1 5 10 15

Ile Arg Lys Val Lys Leu Ser Gln Ala Arg Val Tyr Phe Glu Glu Ala
20 25 30

Ile His Ile Leu Asn Gly Ala Phe Glu Asp Leu Ser Leu Val Ala Thr
35 40 45

Leu Tyr Ile Asn Leu Ala Ala Ile Tyr Leu Lys Gln Arg Leu Arg His
50 55 60

Lys Gly Ser Ala Leu Leu Glu Lys Ala Gly Ala Leu Leu Ala Cys Leu 65 70 75 80

Pro Asp Arg Glu Ser Ser Ala Lys His Glu Leu Asp Val Val Ala Tyr 85 90 95

Val Leu Arg Gln Gly Ile Val Val Gly Ser Ser Pro Leu Glu Ala Arg

100 105 110

Ala Cys Phe Leu Ala Ile Arg Leu Leu Leu Ser Leu Gly Arg His Glu 115 120 125

Glu Val Leu Pro Phe Ala Glu Arg Leu Gln Leu Leu Ser Gly His Pro 130 135 140

Pro Ala Ser Glu Ala Val Ala Ser Val Leu Ser Phe Leu Tyr Asp Lys
145 150 155 160

Lys Tyr Leu Pro His Leu Ala Val Ala Ser Val Gln Gln His Gly Ile 165 170 175

Gln Ser Ala Gln Gly Met Ser Leu Pro Ile Trp Gln Val His Leu Val

			180					185					190		
Leu	Gln	Asn	Thr	Thr	Lys	Leu	Leu	Gly	Phe	Pro	Ser	Pro	Gly	Trp	Gly
		195					200					205			
Glu	Val	Ser	Ala	Leu	Ala	Cys	Pro	Met	Leu	Arg	Gln	Ala	Leu	Ala	Ala
	210					215					220				
Cys	Glu	Glu	Leu	Ala	Asp	Arg	Ser	Thr	Gln	Arg	Ala	Leu	Cys	Leu	Ile
225					230					235					240
Leu	Ser	Lys	Val	Tyr	Leu	Glu	His	Arg	Ser	Pro	Asp	Gly	Ala	Ile	His
				245					250					255	
Tyr	Leu	Ser	Gln	Ala	Leu	Val	Leu	Gly	Gln	Leu	Leu	Gly	Glu	Gl'n	Glu
			260					265					270		
Ser	Phe	Glu	Ser	Ser	Leu	Cys	Leu	Ala	Trp	Ala	Tyr	Leu	Leu	Ala	Ser
		275					280					285			
Gln	Ala	Lys	Lys	Ala	Leu	Asp	Val	Leu	Glu	Pro	Leu	Leu	Cys	Ser	Leu
	290					295					300				
Lys	Glu	Thr	Glu	Ser	Leu	Thr	Gln	Arg	Gly	Val	Ile	Tyr	Asn	Leu	Leu
305					310					315					320
Gly	Leu	Ala	Leu	Gln	Gly	Glu	Gly	Arg	Val	Asn	Arg	Ala	Ala	Lys	Ser
				325					330					335	
Tyr	Leu	Arg	Ala	Leu	Asn	Arg	Ala	Gln	Glu	Val	Gly	Asp	Val	His	Asn
			340					345					350		
Gln	Ala	Val	Ala	Met	Ala	Asn	Leu	Gly	His	Leu	Ser	Leu	Lys	Ser	Trp
		355					360					365			
Ala	Gln	His	Pro	Ala	Arg	Asn	Tyr	Leu	Leu	Gln	Ala	Val	Arg	Leu	Tyr
	370					375					380				
Cys	Glu	Leu	Gln	Ala	Ser	Lys	Glu	Thr	Asp	Met	Glu	Leu	Val	Gln	Val
385					390					395					400
Phe	Leu	Trp	Leu	Ala	Gln	Val	Leu	Val	Ser	Gly	His	Gln	Leu	Thr	His
				405					410					415	

Gly	Leu	Leu	Cys	lyr	Glu	Met	Ala	Leu	Leu	rne	Gly	Leu	Arg	HIS	Arg
			420					425					430		
His	Leu	Lys	Ser	Gln	Leu	Gln	Ala	Thr	Lys	Ser	Leu	Cys	His	Phe	Tyr
		435					440					445			
Ser	Ser	Val	Ser	Pro	Asn	Pro	Glu	Ala	Cys	Ile	Thr	Tyr	His	Glu	His
	450					455					460				
Trp	Leu	Ala	Leu	Ala	Gln	Gln	Leu	Arg	Asp	Arg	Glu	Met	Glu	Gly	Arg
465					470					475					480
Leu	Leu	Glu	Ser	Leu	Gly	Gln	Leu	Tyr	Arg	Asn	Leu	Asn	Thr	Ala	Arg
				485					490					495	
Ser	Leu	Arg	Arg	Ser	Leu	Thr	Cys	Ile	Lys	Glu	Ser	Leu	Arg	Ile	Phe
			500					505					510		
Ile	Asp	Leu	Gly	Glu	Thr	Asp	Lys	Ala	Ala	Glu	Ala	Trp	Leu	Gly	Ala
		515					520					525			
Gly	Arg	Leu	His	Tyr	Leu	Met	Gln	Glu	Asp	Glu	Leu	Val	Glu	Leu	Cys
	530					535					540				
Leu	Gln	Ala	Ala	Ile	Gln	Thr	Ala	Leu	Lys	Ser	Glu	Glu	Pro	Leu	Leu
545					550					555					560
Ala	Leu	Lys	Leu	Cys	Glu	Glu	Ala	Gly	Asp	Val	Phe	Phe	Asn	Gly	Thr
				565					570					575	
Arg	His	Arg	His	His	Ala	Val	Glu	Tyr	Tyr	Arg	Ala	Gly	Ala	Val	Pro
			580					585					590		
Leu	Ala	Arg	Arg	Leu	Lys	Ala	Val	Arg	Thr	Glu	Leu	Arg	Ile	Phe	Asn
		595					600					605			
Lys	Leu	Thr	Glu	Leu	Gln	Ile	Ser	Leu	Glu	Gly	Tyr	Glu	Lys	Ala	Leu
	610					615					620				
Glu	Phe	Ala	Thr	Leu	Ala	Ala	Arg	Leu	Ser	Thr	Val	Thr	Gly	Asp	Gln
625					630					635					640
Arg	Gln	Glu	Leu	Val	Ala	Phe	His	Arg	Leu	Ala	Thr	Val	Tyr	Tyr	Ser

650 655 645 Leu His Met Tyr Glu Met Ala Glu Asp Cys Tyr Leu Lys Thr Leu Ser 670 660 665 Leu Cys Pro Pro Trp Leu Gln Ser Pro Lys Glu Ala Leu Tyr Tyr Ala 680 685 675 Lys Val Tyr Tyr Arg Leu Gly Arg Leu Thr Phe Cys Gln Leu Lys Asp 695 700 690 Ala His Asp Ala Thr Glu Tyr Phe Leu Leu Ala Leu Ala Ala Ala Val 715 720 705 710 Leu Leu Gly Asp Glu Glu Leu Gln Asp Thr Ile Arg Ser Arg Leu Asp 725 730 735 Asn Ile Cys Gln Ser Pro Leu Trp His Ser Arg Pro Ser Gly Cys Ser 740 750 745 Ser Glu Arg Ala Arg Trp Leu Ser Gly Gly Leu Ala Leu 765 755 760

<210> 3435

<211> 289

<212> PRT

<213> Homo sapiens

<400> 3435

Met Phe Asn Thr Cys Val Tyr IIe Leu Gly Val Lys Asp Leu Lys Val

1 5 10 15

Glu Asp Asp Ile Ser Met Lys Val Ile Pro Ile Leu Ser Thr Leu Asn
20 25 30

Cys Ala Leu Leu Glu Thr Lys Lys Ser Leu Pro Glu Glu Arg Ile His
35 40 45

Pro	Asn	Thr	Leu	Val	Lys	Arg	His	Phe	Gln	Glu	Leu	Tyr	Lys	Ala	Asp
	50					55					60				
Arg	Ser	Pro	Ser	Leu	Ser	Val	Ala	Pro	Gln	Asp	Arg	Met	Lys	Asp	Pro
65					70					75					80
Thr	Phe	Leu	Gly	Lys	Leu	Pro	Ser	Gly	Phe	Asp	Leu	Ile	Pro	Pro	Ala
				85					90					95	
Glu	Lys	Cys	Pro	Ser	Glu	Ser	Leu	Thr	Gln	Leu	Asn	Ser	Tyr	Phe	Ser
			100					105					110		
Asp	Pro	Ser	Ala	Tyr	Ile	Leu	Glu	Val	Ser	Thr	Ala	Leu	Asp	Leu	Leu
		115					120					125			
Ala	Glu	His	Pro	Gln	Ser	Pro	Cys	Val	Ser	Asp	Gly	Ile	Cys	Asp	Ala
	130					135					140				
Gly	Phe	Ser	Leu	Val	Met	Thr	Pro	Asp	Pro	Glu	Phe	Leu	Val	Ser	Glu
145					150					155					160
Ala	Glu	Val	Arg	Lys	Glu	Thr	Glu	Thr	Lys	Lys	Asp	Ser	Glu	Glu	Met
				165					170					175	
Leu	Lys	Ala	Lys	Lys	Arg	Val	Phe	Pro	Leu	Ser	Pro	Ala	Ser	Asn	Leu
			180					185					190		
Arg	Val	Gln	Pro	Lys	Arg	Lys	Ala	Ser	Met	Pro	His	Met	Val	Gln	Ser
		195					200					205			
Lys		Val	Asn	Leu	Cys	Arg	Pro	Phe	Pro	Lys		Thr	Ala	Ser	Arg
	210					215					220				
Ala	Asp	Asn	Ser	Ser	Asp	Ser	Pro	Thr	Thr		Lys	Leu	Val	Lys	Gly
225					230					235					240
Gln	Phe	Pro	Gln	Lys	Arg	Lys	Arg	Gly	Lys	His	Asp	Leu	Phe	Met	Trp
				245					250					255	
Val	Ile	Ile	Ile	Ile	Val	Val	Ala	Arg	Arg	Trp	Trp	Leu		Pro	Val
			260					265					270		
Ile	Pro	Ala	Leu	Trp	Glu	Thr	Lys	Trp	Val	Asp	His	Leu	Arg	Ser	Gly

275 280 285

Val

<210> 3436

<211> 798

<212> PRT

<213> Homo sapiens

<400> 3436

Met Gly Lys Ala Ser Pro Ala Ser Gly Leu Ser Arg Pro Lys Thr Leu

1 5 10 15

Val Ser Pro Leu Arg Ser Asn Gln Trp Ser Leu Gln Lys Gly Leu Pro

20 25 30

Glu Gln Tyr Tyr Ser Leu Thr Trp Phe Leu Ser Pro Ile Leu Gly Leu

35 40 45

Ile Phe Thr Pro Leu Ile Gly Ser Ala Ser Asp Arg Cys Thr Leu Ser

50 55 60

Trp Gly Arg Arg Pro Phe Ile Leu Ala Leu Cys Val Gly Val Leu

65 70 75 80

Phe Gly Val Ala Leu Phe Leu Asn Gly Ser Ala Ile Gly Leu Ala Leu

85 90 95

Gly Asp Val Pro Asn Arg Gln Pro Ile Gly Ile Val Leu Thr Val Leu

100 105 110

Gly Val Val Leu Asp Phe Ser Ala Asp Ala Thr Glu Gly Pro Ile

115 120 125

Arg Ala Tyr Leu Leu Asp Val Val Asp Ser Glu Glu Gln Asp Met Ala

130 135 140

Leu	Asn	Ile	His	Ala	Phe	Ser	Ala	Gly	Leu	Gly	Gly	Ala	Ile	Gly	Tyr
145					150					155					160
Val	Leu	Gly	Gly	Leu	Asp	Trp	Thr	Gln	Thr	Phe	Leu	Gly	Ser	Trp	Phe
				165					170					175	
Arg	Thr	Gln	Asn	Gln	Val	Leu	Phe	Phe	Phe	Ala	Ala	Ile	Ile	Phe	Thr
			180	•				185					190		
Val	Ser	Val	Ala	Leu	His	Leu	Phe	Ser	Ile	Asp	Glu	Glu	Gln	Tyr	Ser
		195					200					205			
Pro	Gln	Gln	Glu	Arg	Ser	Ala	Glu	Glu	Pro	Gly	Ala	Leu	Asp	Gly	Gly
	210					215					220				
Glu	Pro	His	Gly	Val	Pro	Ala	Phe	Pro	Asp	Glu	Val	Gln	Ser	Glu	His
225					230					235					240
Glu	Leu	Ala	Leu	Asp	Tyr	Pro	Asp	Val	Asp	Ile	Met	Arg	Ser	Lys	Ser
				245					250					255	
Asp	Ser	Ala	Leu	His	Val	Pro	Asp	Thr	Ala	Leu	Asp	Leu	Glu	Pro	Glu
			260					265					270		
Leu	Leu	Phe	Leu	His	Asp	Ile	Glu	Pro	Ser	Ile	Phe	His	Asp	Ala	Ser
		275					280					285			
Tyr	Pro	Ala	Thr	Pro	Arg	Ser	Thr	Ser	Gln	Glu	Leu	Ala	Lys	Thr	Lys
	290					295					300				
Leu	Pro	Arg	Leu	Ala	Thr	Phe	Leu	Lys	Glu	Ala	Ala	Lys	Glu	Asp	Glu
305					310					315					320
Thr	Leu	Leu	Asp	Asn	His	Leu	Asn	Glu	Ala	Lys	Val	Pro	Asn	Gly	Ser
				325					330					335	
Gly	Ser	Pro	Thr	Lys	Asp	Ala	Leu	Gly	Gly	Tyr	Thr	Arg	Val	Asp	Thr
			340					345					350		
Lys	Pro	Ser	Ala	Thr	Ser	Ser	Ser	Met	Arg	Arg	Arg	Arg	His	Ala	Phe
		355					360					365			
Arg	Arø	Gln	Ala	Ser	Ser	Thr	Phe	Ser	Tvr	Tvr	Glv	Lvs	Leu	Glv	Sei

	370					375					380				
His	Cys	Tyr	Arg	Tyr	Arg	Arg	Ala	Asn	Ala	Val	Val	Leu	Ile	Lys	Pro
385					390					395					400
Ser	Arg	Ser	Met	Ser	Asp	Leu	Tyr	Asp	Met	Gln	Lys	Arg	Gln	Arg	Gln
				405					410					415	
His	Arg	His	Arg	Asn	Gln	Ser	Gly	Ala	Thr	Thr	Ser	Ser	Gly	Asp	Thr
			420					425					430		
Glu	Ser	Glu	Glu	Gly	Glu	Gly	Glu	Thr	Thr	Val	Arg	Leu	Leu	Trp	Leu
		435					440					445			
Ser	Met	Leu	Lys	Met	Pro	Arg	Glu	Leu	Met	Arg	Leu	Cys	Leu	Cys	His
	450					455					460				
Leu	Leu	Thr	Trp	Phe	Ser	Val	Ile	Ala	Glu	Ala	Val	Phe	Tyr	Thr	Asp
465					470					475					480
Phe	Met	Gly	Gln	Val	Ile	Phe	Glu	Gly	Asp	Pro	Lys	Ala	Pro	Ser	Asn
				485					490					495	
Ser	Thr	Ala	Trp	Gln	Ala	Tyr	Asn	Ala	Gly	Val	Lys	Met	Gly	Cys	Trp
			500					505					510		
Gly	Leu	Val	Ile	Tyr	Ala	Ala	Thr	Gly	Ala	Ile	Cys	Ser	Ala	Leu	Leu
		515					520					525			
Gln	Lys	Tyr	Leu	Asp	Asn	Tyr	Asp	Leu	Ser	Val	Arg	Val	Ile	Tyr	Val
	530					535					540				
Leu	Gly	Thr	Leu	Gly	Phe	Ser	Val	Gly	Thr	Ala	Val	Met	Ala	Met	Phe
545					550					555					560
Pro	Asn	Val	Tyr	Val	Ala	Met	Val	Thr	Ile	Ser	Thr	Met	Gly	Ile	Val
				565					570					575	
Ser	Met	Ser	Ile	Ser	Tyr	Cys	Pro	Tyr	Ala	Leu	Leu	Gly	Gln	Tyr	His
			580					585					590		
Asp	Ile	Lys	Gln	Tyr	Ile	His	His	Ser	Pro	Gly	Asn	Ser	Lys	Arg	Gly
		595					600					605			

Phe Gly Ile Asp Cys Ala Ile Leu Ser Cys Gln Val Tyr Ile Ser Gln Ile Leu Val Ala Ser Ala Leu Gly Gly Val Val Asp Ala Val Gly Thr Val Arg Val Ile Pro Met Val Ala Ser Val Gly Ser Phe Leu Gly Phe Leu Thr Ala Thr Phe Leu Val Ile Tyr Pro Asn Val Ser Glu Glu Ala Lys Glu Glu Gln Lys Gly Leu Ser Ser Pro Leu Ala Gly Glu Gly Arg Ala Gly Gly Asn Ser Glu Lys Pro Thr Val Leu Lys Leu Thr Arg Lys Glu Gly Leu Gln Gly Pro Val Glu Thr Glu Arg Leu Gln Val Leu Thr Ser Val Arg Ser Arg His Ile Gly Trp Cys Arg Ser Cys Trp Arg Val Phe Phe Phe Met Ile Ile Leu Glu Lys Lys Phe Ser Phe Pro Gln Cys Gly Ser Leu Arg Arg Met Thr Tyr Leu Leu Phe Leu Ser Glu Leu Asp Thr Leu Cys Pro Gly Gln Pro Cys Pro Trp Ala Ala Thr Ala His Gln Ser Trp Lys Glu Ala Gly Pro Gly Gly Leu Gly Arg Arg Gln

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<211> 275

<212> PRT

<213> Homo sapiens

<400> 3437

Met Gly Pro Leu His Ser His Thr Ser Trp Gly Ala Ser Pro Thr Pro 5 10 15 1 Leu Thr Gly Thr Asp Pro Ser His Val Gln Gly Glu Val Leu Lys Glu 25 30 20 Arg Pro Asp Val Val Ala Gly Val Asp Leu Leu His Leu His Leu Arg 45 35 40 Val His Val Ala Val Val His Glu Val His Ile Gly His Phe His Leu 55 60 50 Gly Ser Gly Arg Glu Val Arg Gly Ala Ser Arg Ala Ala Trp Pro Gly 80 75 65 70 Ser Pro Cys His Asn Ala Pro Val Pro Trp Pro Pro Val Pro Ala His 95 90 85 Phe Pro Gly Phe Ala Ser Pro Thr Leu Pro Val Pro Trp Leu Tyr Pro 100 105 110

115 120 125 Leu Ser Asp Ala Val Leu Met Arg His His Arg His His Val Leu Gln

Pro Leu Arg Pro Ile Ser Ser Arg Leu Ala Gln Ser Pro Asp Pro His

130 135 140

Arg Gln Gln Gly Gly Ala Leu Asp Leu Ser Val Asp Val Phe Ala Leu 145 150 155 160

Gly Thr Gly Gly Gln Gln Val His Gln Gly Asn Val Val His Glu Gly 165 170 175

Ala Val Val Leu His Ala Val Ala Gly Gly Leu His His Val Gln Gln
180 185 190

Val Gly Gln Arg Cys Leu Ile Ile Val Glu His Asp His Ile Val Thr 195 200 205 Cys Ile Gly Gln Leu Arg Ala Gly Gly Gly Thr Cys His Thr Leu Ser Val Gln Gln Ala Leu Gly Ser Pro Leu Leu Cys Leu Pro Gly Arg Asn Trp Asp Ser Asp His Ser Pro Tyr Leu Lys Ser Gly Lys Pro Ser Pro Gly Trp Asp Leu Gly Val Pro Gln Leu Met Ser Gln Ala Leu Cys Gln Gln Arg Tyr <210> 3438 <211> 1508 <212> PRT <213> Homo sapiens

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Met Phe Pro Ala Arg Gly Val Pro Leu His Leu Glu Gly Glu Gly Val Phe Pro Trp Gly Pro Gly Asp Val Ser Leu Pro Tyr Leu Ser Thr Ser Asp Val Ser Phe Ser Val Ile Val Glu Asn Val Asn Cys Tyr Ser Ser Gly Met Ile Cys Arg Lys Phe Ile Ser Ile Asn Val Gly Asn Ser Leu Ile Val Phe Asp Asp Ser Gly Asn Pro Ser Pro Glu Ser Phe Leu

Asp Asp Lys Gln Glu Val His Thr Trp Arg Val Gly Phe Phe Thr Leu

				85					90					95	
Val	His	Phe	Pro	Gln	Glu	His	Ile	Thr	Leu	Leu	Trp	Asp	Gln	Arg	Thr
			100					105					110		
Thr	Val	His	Val	Gln	Ala	Gly	Pro	Gln	Trp	Gln	Gly	Gln	Leu	Ala	Gly
		115					120					125			
Leu	Cys	Gly	Asn	Phe	Asp	Leu	Lys	Thr	Ile	Asn	Glu	Met	Arg	Thr	Pro
	130					135					140				
Glu	Asn	Leu	Glu	Leu	Thr	Asn	Pro	Gln	Glu	Phe	Gly	Ser	Ser	Trp	Ala
145					150					155					160
Ala	Val	Glu	Cys	Pro	Asp	Thr	Leu	Asp	Pro	Arg	Asp	Met	Cys	Val	Leu
				165					170					175	
Asn	Pro	Leu	Arg	Glu	Pro	Phe	Ala	Lys	Lys	Glu	Cys	Ser	Ile	Leu	Leu
			180					185					190		
Ser	Glu	Val	Phe	Glu	Ile	Cys	His	Pro	Val	Val	Asp	Val	Thr	Trp	Phe
		195					200					205			
Tyr	Ser	Asn	Cys	Leu	Thr	Asp	Thr	Cys	Gly	Cys	Ser	Gln	Gly	Gly	Asp
	210					215					220				
Cys	Glu	Cys	Phe	Cys	Ala	Ser	Val	Ser	Ala	Tyr	Ala	His	Gln	Cys	Cys
225					230					235					240
Gln	His	Gly	Val	Ala	Val	Asp	Trp	Arg	Thr	Pro	Arg	Leu	Cys	Leu	Leu
				245					250					255	
Gly	Lys	Gly	Pro	Tyr	Gln	Leu	Ser	Ser	Leu	Ala	Ala	Gly	Gly	Ala	Leu
			260					265					270		
Val	Gly	Met	Lys	Ala	Val	Gly	Asp	Asp	Ile	Val	Leu	Val	Arg	Thr	Glu
		275					280					285			
Asp	Val	Ala	Pro	Ala	Asp	Ile	Val	Ser	Phe	Leu	Leu	Thr	Ala	Ala	Leu
	290					295					300				
Tyr	Lys	Ala	Lys	Ala	His	Asp	Pro	Asp	Val	Val	Ser	Leu	Glu	Ala	Ala
305					310					315					320

Asp	Arg	Pro	Asn	Phe	Phe	Leu	His	Val	Thr	Ala	Asn	Gly	Ser	Leu	Glu
				325					330					335	
Leu	Ala	Lys	Trp	Gln	Gly	Arg	Asp	Thr	Phe	Gln	Gln	His	Ala	Ser	Phe
			340					345					350		
Leu	Leu	His	Arg	Gly	Thr	Arg	Gln	Ala	Gly	Leu	Val	Ala	Leu	Glu	Ser
		355					360					365			
Leu	Ala	Lys	Pro	Ser	Ser	Phe	Leu	Tyr	Val	Ser	Gly	Pro	Val	Leu	Ala
	370					375					380				
Leu	Arg	Leu	Tyr	Glu	His	Thr	Glu	Val	Phe	Arg	Arg	Gly	Thr	Leu	Phe
385					390					395					400
Arg	Leu	Leu	Asp	Ala	Lys	Pro	Ser	Gly	Ala	Ala	Tyr	Pro	Ile	Cys	Glu
				405					410					415	
Trp	Arg	Tyr	Asp	Ala	Cys	Ala	Ser	Pro	Cys	Phe	Gln	Thr	Cys	Arg	Asp
			420					425					430		
Pro	Arg	Ala	Ala	Ser	Cys	Arg	Asp	Val	Pro	Arg	Val	Glu	Gly	Cys	Val
		435					440					445			
Pro	Val	Cys	Pro	Thr	Pro	Gln	Val	Leu	Asp	Glu	Val	Thr	Gln	Arg	Cys
	450					455					460				
Val	Tyr	Leu	Glu	Asp	Cys	Val	Glu	Pro	Ala	Val	Trp	Val	Pro	Thr	Glu
465					470					475					480
Ala	Leu	Gly	Asn	Glu	Thr	Leu	Pro	Pro	Ser	Gln	Gly	Leu	Pro	Thr	Pro
				485					490					495	
Ser	Asp	Glu	Glu	Pro	Gln	Leu	Ser	Gln	Glu	Ser	Pro	Arg	Thr	Pro	Thr
			500					505					510		
His	Arg	Pro	Ala	Leu	Thr	Pro	Ala	Ala	Pro	Leu	Thr	Thr	Ala	Leu	Asn
		515					520					525			
Pro	Pro	Val	Thr	Ala	Thr	Glu	Glu	Pro	Val	Val	Ser	Pro	Gly	Pro	Thr
	530					535					540				
Glo	Th≠	Thr	Len	Gla	Cln	Pro	ىم آ	Glu	Len	Thr	Ala	Ser	Gln	Leu	Pro

545					550					555					560
Ala	Gly	Pro	Thr	Glu	Ser	Pro	Ala	Ser	Lys	Gly	Val	Thr	Ala	Ser	Leu
				565					570					575	
Leu	Ala	Ile	Pro	His	Thr	Pro	Glu	Ser	Ser	Ser	Leu	Pro	Val	Ala	Leu
			580					585					590		
Gln	Thr	Pro	Thr	Pro	Gly	Met	Val	Ser	Gly	Ala	Met	Glu	Thr	Thr	Arg
		595					600					605			
Val	Thr	Val	Ile	Phe.	Ala	Gly	Ser	Pro	Asn	Ile	Thr	Val	Ser	Ser	Arg
	610					615					620				
Ser	Pro	Pro	Ala	Pro	Arg	Phe	Pro	Leu	Met	Thr	Lys	Ala	Val	Thr	Val
625					630					635					640
Arg	Gly	His	Gly	Ser	Leu	Pro	Val	Arg	Thr	Thr	Pro	Pro	Gln	Pro	Ser
				645					650					655	
Leu	Thr	Ala	Ser	Pro	Ser	Ser	Arg	Pro	Val	Ala	Ser	Pro	Gly	Ala	Ile
			660					665					670		
Ser	Arg	Ser	Pro	Thr	Ser	Ser	Gly	Ser	His	Lys	Ala	Val	Leu	Thr	Pro
		675					680					685			
Ala	Val	Thr	Lys	Val	Ile	Ser	Arg	Thr	Gly	Val	Pro	Gln	Pro	Thr	Gln
	690					695					700				
Ala	Gln	Ser	Ala	Ser	Ser	Pro	Ser	Thr	Pro	Leu	Thr	Val	Ala	Gly	Thr
705					710					715					720
Ala	Ala	Glu	Gln	Val	Pro	Val	Ser	Pro	Leu	Ala	Thr	Arg	Ser	Leu	Glu
				725					730					735	
Ile	Val	Leu	Ser	Thr	Glu	Lys	Gly	Glu	Ala	Gly	His	Ser	Gln	Pro	Met
			740					745					750		
Gly	Ser	Pro	Ala	Ser	Pro	Gln	Pro	His	Pro	Leu	Pro	Ser	Ala	Pro	Pro
		755					760					765			
Arg	Pro	Ala	Gln	His	Thr	Thr	Met	Ala	Thr	Arg		Pro	Ala	Leu	Pro
	770					775					780				

Pro	Glu	Thr	Pro	Ala	Ala	Ala	Ser	Leu	Ser	Thr	Ala	Thr	Asp	Gly	Leu
785					790					795					800
Ala	Ala	Thr	Pro	Phe	Met	Ser	Leu	Glu	Ser	Thr	Arg	Pro	Ser	Gln	Leu
				805					810					815	
Leu	Ser	Gly	Leu	Pro	Pro	Asp	Thr	Ser	Leu	Pro	Leu	Ala	Lys	Val	Gly
			820					825					830		
Thr	Ser	Ala	Pro	Val	Ala	Thr	Pro	Gly	Pro	Lys	Ala	Ser	Val	Ile	Thr
		835					840					845			
Thr	Pro	Leu	Gln	Pro	Gln	Ala	Thr	Thr	Leu	Pro	Ala	Gln	Thr	Leu	Ser
	850					855					860				
Pro	Val	Leu	Pro	Phe	Thr	Pro	Ala	Ala	Met	Thr	Gln	Ala	His	Pro	Pro
865					870					875					880
Thr	His	Ile	Ala	Pro	Pro	Ala	Ala	Gly	Thr	Ala	Pro	Gly	Leu	Leu	Leu
				885					890					895	
Gly	Ala	Thr	Leu	Pro	Thr	Ser	Gly	Val	Leu	Pro	Val	Ala	Glu	Gly	Thr
			900					905					910		
Ala	Ser	Met	Val	Ser	Val	Val	Pro	Arg	Lys	Ser	Thr	Thr	Gly	Lys	Val
		915					920					925			
Ala	Ile	Leu	Ser	Lys	Gln	Val	Ser	Leu	Pro	Thr	Ser	Met	Tyr	Gly	Ser
	930					935					940				
Ala	Glu	Gly	Gly	Pro	Thr	Glu	Leu	Thr	Pro	Ala	Thr	Ser	His	Pro	Leu
945					950					955					960
Thr	Pro	Leu	Val	Ala	Glu	Pro	Glu	Gly	Ala	Gln	Ala	Gly	Thr	Ala	Leu
				965					970					975	
Pro	Val	Pro	Thr	Ser	Tyr	Ala	Leu	Ser	Arg	Val	Ser	Ala	Arg	Thr	Ala
			980					985					990		
Pro	Gln	Asp	Ser	Met	Leu	Val	Leu	Leu	Pro	Gln	Leu	Ala	Glu	Ala	His
		995					1000					1005			
Glv	Thr	Ser	Ala	Glv	Pro	His	Leu	Ala	Ala	Glu	Pro	Val	Asp	Glu	Ala

1010		1015)				1020				
Thr Thr Glu	Pro Ser	Gly Arg	Ser	Ala	Pro	Ala	Leu	Ser	Ile	Val	Glu
1025		1030			-	1035]	1040
Gly Leu Ala	Glu Ala	Leu Ala	Thr	Thr	Thr	Glu	Ala	Asn	Thr	Ser	Thr
	1045]	1050]	055	
Thr Cys Val	Pro Ile	Ala Glu	Gln	Asp	Cys	Val	Arg	His	Ile	Cys	Leu
	1060			1065					1070		
Glu Gly Gln	Leu Ile	Arg Val	Asn	Gln	Ser	Gln	His	Cys	Pro	Gln	Gly
1075			1080					1085			
Ala Ala Pro	Pro Arg	Cys Gly	Ile	Leu	Gly	Leu	Ala	Val	Arg	Val	Gly
1090		1095	5				1100				
Gly Asp Arg	Cys Cys	Pro Lei	Trp	Glu	Cys	Ala	Cys	Arg	Cys	Ser	Ile
1105		1110				1115				-	1120
Phe Pro Asp	Leu Ser	Phe Ala	Thr	Phe	Asp	Gly	Ser	His	Val	Ala	Leu
	1125				1130]	1135	
Phe Lys Glu	Ala Ile	Tyr Ile	Leu	Ser	Gln	Ser	Pro	Asp	Glu	Met	Leu
	1140			1145					1150		
Thr Val His	Val Leu	Asp Cys	Lys	Ser	Ala	Asn	Leu	Gly	His	Leu	Asn
1155			1160					1165			
Trp Pro Pro	Phe Cys	Leu Va	Met	Leu	Asn	Met	Thr	His	Leu	Ala	His
1170		1175	5				1180				
Gln Val Thr	Ile Asp	Arg Phe	e Asn	Arg	Lys	Val	Thr	Val	Asp	Leu	Gln
1185		1190				1195					1200
Pro Val Trp	Pro Pro	Val Se	Arg	Tyr	Gly	Phe	Arg	Ile	Glu	Asp	Thr
	1205				1210					1215	
Gly His Met	Tyr Met	Ile Lei	ı Thr	Pro	Ser	Asp	Ile	Gln	Ile	Gln	Trp
	1220			1225					1230		
Leu His Ser	Ser Gly	Leu Me	Ile	Val	Glu	Ala	Ser	Lys	Thr	Ser	Lys
1235			1240					1245	•		

A	la Gln	Gly	His	Gly	Leu	Cys	Gly	Ile	Cys	Asp	Gly	Asp	Ala	Ala	Asn
	1250]	1255				2	1260				
A	sp Leu	Thr	Leu	Lys	Asp	Gly	Ser	Val	Val	Gly	Gly	Ala	Glu	Asp	Pro
1	265]	1270]	1275]	1280
A	la Pro	Phe	Leu	Asp	Ser	Trp	Gln	Val	Pro	Ser	Ser	Leu	Thr	Ser	Val
]	1285]	1290]	1295	
G	ly Gln	Thr	Arg	Phe	Arg	Pro	Asp	Ser	Cys	Ala	Thr	Thr	Asp	Cys	Ser
		-	1300				-	1305					1310		
P	ro Cys	Leu	Arg	Met	Val	Ser	Asn	Arg	Thr	Phe	Ser	Ala	Cys	His	Arg
	1	1315					1320				-	1325			
P	he Val	Pro	Pro	Glu	Ser	Phe	Cys	Glu	Leu	Trp	Ile	Arg	Asp	Thr	Lys
	1330				-	1335			•		1340				
T	yr Val	Gln	Gln	Pro	Cys	Val	Ala	Leu	Thr	Val	Tyr	Val	Ala	Met	Cys
1	345				1350				-	1355				-	1360
Н	is Lys	Phe	His	Val	Cys	Ile	Glu	Trp	Arg	Arg	Ser	Asp	Tyr	Cys	Pro
				1365				-	1370					1375	
P	he Leu	Cys	Ser	Ser	Asp	Ser	Thr	Tyr	Gln	Ala	Cys	Val	Thr	Ala	Cys
			1380					1385					1390		
G	lu Pro	Pro	Lys	Thr	Cys	Gln	Asp	Gly	Ile	Leu	Gly	Pro	Leu	Asp	Pro
		1395					1400					1405			
G	lu His	Cys	Gln	Val	Leu	Gly	Glu	Gly	Cys	Val	Cys	Ser	Glu	Gly	Thr
	1410					1415					1420				
Ι	le Leu	His	Arg	Arg	His	Ser	Ala	Leu	Cys	Ile	Pro	Glu	Ala	Lys	Cys
1	425				1430					1435					1440
A	la Cys	Gly	Asp	Cys	Pro	Asp	Ser	Ile	Pro	Glu	Cys	Gln	Glu	Gly	Glu
				1445					1450					1455	
A	la Leu	Thr	Val	His	Arg	Asn	Thr	Thr	Glu	Leu	Cys	Cys	Pro	Leu	Tyr
			1460					1465					1470		
G	In Cvs	Val	Cvs	Glu	Asn	Phe	Aro	Cvs	Pro	Gln	Val	Gln	Cvs	Glv	Leu

1475

1480

1485

Gly Thr Ala Leu Val Glu Val Trp Ser Pro Asp Arg Cys Cys Pro Tyr 1490 1495 1500

Lys Ser Cys Gly

1505

<210> 3439

<211> 516

<212> PRT

<213> Homo sapiens

<400> 3439

Met Gln Asp Glu Val Gly Gly Phe Gly Thr Gly Arg Leu Gln Val Ala

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Gly Val Arg Val Thr Val Ala Ala Leu Phe Ala Pro Ala Ala Pro Val
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Val Arg Leu Asn Val Phe Ala Gln Val Val Ala Ala His Glu Ala Leu 35 40 45

Val Ala His Arg Thr Gly Glu Ala Leu Leu Ala Arg Val Ser Pro Gln
50 55 60

Met Pro Leu Gln Leu Val Arg Ala Arg Glu Ala Leu Ala Ala Glu Glu 65 70 75 80

Pro Val Ala His Glu Gly Pro Leu Ala Arg Val Pro Ala Gln Val Arg 85 90 95

Leu Gln Val Arg Arg Leu Pro Val His Leu Ala Ala Ala Arg Asn Val 100 105 110

Ala Ala Val Gln Ala Leu Ala Pro Gln Ala Arg Pro Gly Arg Ala Gln
115 120 125

	Pro	Leu	Arg	Leu	Leu	Ala	Val	Gly	Ala	Val	Ala	Gly	Gly	Ala	Ala	Arg
		130					135					140				
	Val	Ala	Ala	Gly	Arg	Ala	Cys	Arg	Ala	Pro	Pro	Gly	Gly	Gly	Ser	Arg
	145					150					155					160
	Gly	Ala	Arg	Tyr	His	Gly	Ala	Gly	Gly	Gly	Gly	Cys	His	Gly	Gly	Ala
					165					170					175	
	Gly	Val	Arg	Ile	Gly	Gly	Gln	His	Arg	Leu	Glu	Ala	Val	Leu	Gly	Gln
				180					185					190		
	Gln	Val	Leu	Ala	Gly	Gly	Glu	Gln	Val	Gly						
			195					200					205			
	Ala	Glu	Ala	Arg	Gly	Ala	Glu	Gly	Gly	Val	Arg	Glu	Arg	Ala	Glu	Val
		210					215					220				
	Gly	Val	Val	Gly	Ala	Gln	Leu	Arg	Val	Gln	Arg	Gly	Leu	Gly	Gly	Ala
	225					230					235					240
	Arg	Val	Gln	Arg	Ala	Leu	Glu	Pro	Pro	Ser	Gly	Val	Leu	His	Phe	Gln
					245					250					255	
	Pro	Arg	Ala	Arg	Ala	Ala	Val	His	Val	Pro	Pro	Arg	Arg	Arg	Arg	Ala
				260					265					270		
	Val	Gly	His	Leu	Ala	Gly	Arg	Gln	Arg	Arg	Met	Glu	Ala	Arg	Leu	Val
			275					280					285			
•	Pro	Gly	Leu	Val	Arg	Val	Arg	His	Ala	His	Ala	Arg	Val	Gln	Pro	Val
		290					295					300				
	Gly	Cys	Arg	Arg	Val	His	Leu	Gly	Asn	Glu	Gly	Arg	Leu	Ala	Thr	Arg
	305					310					315					320
	Leu	Leu	Arg	Gly	His	Pro	Gly	Arg	Cys	Arg	Arg	Gly	Ser	Arg	Arg	Val
					325					330					335	
	Gly	Glu	Glu	Ala	Ala	Val	Val	Ala	Ala	Glu	Gly	Gly	Arg	Arg	Gly	Arg
				340					345					350		
	Arg	Gly	Gly	Gln	Ala	Glu	Gly	Ala	Val	Gly	Gly	Ala	Arg	Ala	Ala	Arg

Gln Ala Ala Arg Ala Thr Ala Pro Gly Gly His Arg Glu Ala Arg Glu Ala Gly Ala Glu Val Ala Ala Gly Arg Gly Ala Leu Pro Gly Val Lys Ala Ala Phe Gly Glu Gly Ala Arg Leu Trp Gln Arg Arg Gln Arg Ala Arg Val Ala Asp Leu Val Ala Gly Arg Arg Gln His Gly Gln Arg Gly Arg Ser Glu Ala Arg Leu Phe Leu Glu Trp Val Gly Trp Gly Arg Glu Gln Glu Gly Gly Gln Glu Glu Val Gly Glu Glu Thr Lys Cys Thr Arg Glu Gln Pro Arg Pro Leu Arg Leu Leu Pro Gly Gly Pro Gly Ser Pro Pro Arg Ala Ser Ser Pro Arg Ala Arg Gly Gly Val Ala Ala Pro Gly Ala Glu Gln Gly Arg Ser Pro Gly Arg Arg Ser Arg Arg Arg Lys Val Ala Leu Arg

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<212> PRT

<213> Homo sapiens

<400> 3440

Met Pro Leu Leu Ala Ser Pro Gly Pro Ala Pro Ala Cys Trp Arg Pro Leu Glu Ala Gln Pro Leu Pro Gln Gln Trp Ala Leu His Ala His Leu Leu Pro Arg Arg Gly Leu Leu Gly Pro Gly Ser Arg Leu Gly Ala Ala Pro Ala Gly Pro Ala Pro Ala Ser Arg Pro Ser Gly Gly Gln Ala His Ala Ser Gly Arg Pro Leu Pro Ala Trp Arg Leu Leu Cys Met Gly Ser Arg Ser Cys Thr Ser Ser Ser Arg Ser Leu Gln Ala Gln Leu Phe Leu Pro Ala Ala Ser Ala Gly Pro Asp Cys Arg Gln Val Gly Leu Ser Arg Asp Ser Ser Cys Leu Pro Ala Ala Ser Val Gly Pro Asp Cys His Gln Val Gly Leu Ser Lys Asp Ser Ser Cys Leu Pro Val Thr Ser Val Gly Pro Ser Arg Pro Gln Val Gly Leu Pro Arg Pro Ser Ser Gly Leu Ser Ala Ala Ser Pro Ser Ala Lys Val Pro Arg Val Ser Leu Ser Arg Pro Arg Ser Ser Cys Leu Pro Val Ala Ser Phe Gly Pro Ala Gln Phe Met Pro Pro Gly Gly Leu Pro Arg Pro His Phe

<210> 3441

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3441

Met Leu His Trp Arg Lys Gln Ser Ser Ala Arg Pro Ser Ala Thr Ala

1 5 10 15

Ser Gln Val His Lys Arg Lys Thr Lys Gln Asn Lys Pro Pro Thr His
20 25 30

Thr His Val Tyr Thr Asp Thr Tyr Met Cys Gly Ile Arg Gly Arg Ala
35 40 45

Arg Val His Phe Pro Gly Gln Thr Trp Asp Ser Lys Pro Asp Phe Gly
50 55 60

Val Ile Gln Ile Thr Phe His Leu Phe Cys Cys Leu Phe Ser Ser Val
65 70 75 80

His Val Lys Asn Gly Pro Gln Pro Thr Gly Asn Trp Phe Gly Tyr Leu 85 90 95

Pro Leu Pro Phe Lys Leu Thr Gln Ala Lys Ile Lys Val Leu Asn Asp 100 105 110

<210> 3442

<211> 1183

<212> PRT

<213> Homo sapiens

<400> 3442

Met Gln Ala Ile Ile Gln Gly Phe Ser Tyr Asp Leu Leu Lys Lys Ile

1 5 10 15

Asp	Ser	Pro	Gln	Arg	Leu	Val	Tyr	Ser	Pro	Ser	Trp	Cys	Gly	Gly	Leu
			20					25					30		
Val	Gln	Gly	Asn	Pro	Asn	Gly	Ser	Pro	Asn	Arg	Leu	Leu	Lys	Ala	Gly
		35					40					45			
Val	Ile	Ser	Ala	Gln	Asn	Ile	Tyr	Ser	Phe	Gly	Phe	Gly	Lys	Phe	Tyr
	50					55					60				
Leu	Thr	Gly	Ala	Thr	Gln	Met	Ala	Tyr	Leu	Gly	Ser	Leu	Pro	Val	Ile
65					70					75					80
Gly	Glu	Lys	Glu	Val	Ile	Gln	Ala	Asp	Asp	Glu	Pro	Thr	Phe	Ser	Phe
				85					90					95	
Phe	Ser	Gly	Pro	Tyr	Met	Val	Met	Thr	Asn	Leu	Val	Trp	Asn	Gly	Ser
			100					105					110		
Arg	Val	Thr	Val	Lys	Glu	Leu	Asn	Leu	Pro	Thr	His	Pro	His	Cys	Ser
		115					120					125			
Arg	Leu	Arg	Leu	Ala	Asp	Leu	Leu	Ile	Ala	Glu	Gln	Glu	His	Ser	Ser
	130					135					140				
Lys	Leu	Arg	His	Pro	Tyr	Leu	Leu	Gln	Leu	Met	Ala	Val	Cys	Leu	Ser
145					150					155					160
Gln	Asp	Leu	Glu	Lys	Thr	Arg	Leu	Val	Tyr	Glu	Arg	Ile	Thr	Ile	Gly
				165					170					175	
Thr	Leu	Phe	Ser	Val	Leu	His	Glu	Arg	Arg	Ser	Gln	Phe	Pro	Val	Leu
			180					185					190		
His	Met	Glu	Val	Ile	Val	His	Leu	Leu	Leu	Gln	Ile	Ser	Asp	Ala	Leu
		195					200					205			
Arg	Tyr	Leu	His	Phe	Gln	Gly	Phe	Ile	His	Arg	Ser	Leu	Ser	Ser	Tyr
	210					215					220				
Ala	Val	His	Ile	Ile	Ser	Pro	Gly	Glu	Ala	Arg	Leu	Thr	Asn	Leu	Glu
225					230					235					240
Tvr	Met	Leu	Glu	Ser	Glu	Asp	Arg	Glv	Val	Gln	Arg	Asp	Leu	Thr	Arg

				245					250					255	
Val	Pro	Leu	Pro	Thr	Gln	Leu	Tyr	Asn	Trp	Ala	Ala	Pro	Glu	Val	Ιle
			260					265					270		
Leu	Gln	Lys	Ala	Ala	Thr	Val	Lys	Ser	Asp	Ile	Tyr	Ser	Phe	Ser	Met
		275					280					285			
Ile	Met	Gln	Glu	Ile	Leu	Thr	Asp	Asp	Ile	Pro	Trp	Lys	Gly	Leu	Asp
	290					295					300				
Gly	Ser	Val	Val	Lys	Lys	Ala	Val	Val	Ser	Gly	Asn	Tyr	Leu	Glu	Ala
305					310					315					320
Asp	Val	Arg	Leu	Pro	Lys	Pro	Tyr	Tyr	Asp	Ile	Val	Lys	Ser	Gly	Ile
				325					330					335	
His	Val	Lys	Gln	Lys	Asp	Arg	Thr	Met	Asn	Leu	Gln	Asp	Ile	Arg	Tyr
			340					345					350		
Ile	Leu	Lys	Asn	Asp	Leu	Lys	Asp	Phe	Thr	Gly	Ala	Gln	Arg	Thr	Glr
		355					360					365			
Pro	Thr	Glu	Ser	Pro	Arg	Val	Gln	Arg	Tyr	Gly	Leu	His	Pro	Asp	Val
	370					375					380				
Asn	Val	Tyr	Leu	Gly	Leu	Thr	Ser	Glu	His	Pro	Arg	Glu	Thr	Pro	Asp
385					390					395					400
Met	Glu	Ile	Ile	Glu	Leu	Lys	Glu	Met	Gly	Ser	Gln	Pro	His	Ser	Pro
				405					410					415	
Arg	Val	His	Ser	Leu	Phe	Thr	Glu	Gly	Thr	Leu	Asp	Pro	Gln	Ala	Pro
			420					425					430		
Asp	Pro	Cys	Leu	Met	Ala	Arg	Glu	Thr	Gln	Asn	Gln	Asp	Ala	Pro	Cys
		435					440					445			
Pro	Ala	Pro	Phe	Met	Ala	Glu	Glu	Ala	Ser	Ser	Pro	Ser	Thr	Gly	Gln
	450					455					460				
Pro	Ser	Leu	Cys	Asn	Phe	Glu	Ile	Asn	Glu	Ile	Tyr	Ser	Gly	Cys	Let
465					470					475					480

Ile	Leu	Glu	Asp	Asp	He	Glu	Glu	Pro	Pro	Gly	Ala	Ala	Ser	Ser	Leu
				485					490					495	
Glu	Ala	Asp	Gly	Pro	Asn	Gln	Val	Asp	Glu	Leu	Lys	Ser	Met	Glu	Glu
			500					505					510		
Glu	Leu	Asp	Lys	Met	Glu	Arg	Glu	Ala	Cys	Cys	Phe	Gly	Ser	Glu	Asp
		515					520					525			
Glu	Ser	Ser	Ser	Lys	Ala	Glu	Thr	Glu	Tyr	Ser	Phe	Asp	Asp	Trp	Asp
	530					535					540				
Trp	Gln	Asn	Gly	Ser	Leu	Ser	Ser	Leu	Ser	Leu	Pro	Glu	Ser	Thr	Arg
545					550					555					560
Glu	Ala	Lys	Ser	Asn	Leu	Asn	Asn	Met	Ser	Thr	Thr	Glu	Glu	Tyr	Leu
				565					570					575	
Ile	Ser	Lys	Cys	Val	Leu	Asp	Leu	Lys	Ile	Met	Gln	Thr	Ile	Met	His
			580					585					590		
Glu	Asn	Asp	Asp	Arg	Leu	Arg	Asn	Ile	Glu	Gln	Ile	Leu	Asp	Glu	Val
		595					600					605			
Glu	Met	Lys	Gln	Lys	Glu	Gln	Glu	Glu	Arg	Met	Ser	Leu	Trp	Ala	Thr
	610					615					620				
Ser	Arg	Glu	Phe	Thr	Asn	Ala	Tyr	Lys	Leu	Pro	Leu	Ala	Val	Gly	Pro
625					630					635					640
Pro	Ser	Leu	Asn	Tyr	Ile	Pro	Pro	Val	Leu	Gln	Leu	Ser	Gly	Gly	Gln
				645					650					655	
Lys	Pro	Asp	Thr	Ser	Gly	Asn	Tyr	Pro	Thr	Leu	Pro	Arg	Phe	Pro	Arg
			660					665					670		
Met	Leu	Pro	Thr	Leu	Cys	Asp	Pro	Gly	Lys	Gln	Asn	Thr	Asp	Glu	Gln
		675					680					685			
Phe	Gln	Cys	Thr	Gln	Gly	Ala	Lys	Asp	Ser	Leu	Glu	Thr	Ser	Arg	Ile
	690					695					700				
Gln	Asn	Thr	Ser	Ser	Gln	Glv	Arg	Pro	Arg	Glu	Ser	Thr	Ala	Gln	Ala

Lys Ala Thr Gln Phe Asn Ser Ala Leu Phe Thr Leu Ser Ser His Arg Gln Gly Pro Ser Ala Ser Pro Ser Cys His Trp Asp Ser Thr Arg Met Ser Val Glu Pro Val Ser Ser Glu Ile Tyr Asn Ala Glu Ser Arg Asn Lys Asp Asp Gly Lys Val His Leu Lys Trp Lys Met Glu Val Lys Glu Met Ala Lys Lys Ala Ala Thr Gly Gln Leu Thr Val Pro Pro Trp His Pro Gln Ser Ser Leu Thr Leu Glu Ser Glu Ala Glu Asn Glu Pro Asp Ala Leu Leu Gln Pro Pro Ile Arg Ser Pro Glu Asn Thr Asp Trp Gln Arg Val Ile Glu Tyr His Arg Glu Asn Asp Glu Pro Arg Gly Asn Gly Lys Phe Asp Lys Thr Gly Asn Asn Asp Cys Asp Ser Asp Gln His Gly Arg Gln Pro Arg Leu Gly Ser Phe Thr Ser Ile Arg His Pro Ser Pro Arg Gln Lys Glu Gln Pro Glu His Ser Glu Ala Phe Gln Ala Ser Ser Asp Thr Leu Val Ala Val Glu Lys Ser Tyr Ser Thr Ser Ser Pro Ile Glu Glu Asp Phe Glu Gly Ile Gln Gly Ala Phe Ala Gln Pro Gln Val Ser Gly Glu Glu Lys Phe Gln Met Arg Lys Ile Leu Gly Lys Asn Ala

Glu	Ile	Leu	Pro	Arg	Ser	Gln	Phe	Gln	Pro	Val	Arg	Ser	Thr	Glu	Asp
945					950					955					960
Glu	Gln	Glu	Glu	Thr	Ser	Lys	Glu	Ser	Pro	Lys	Glu	Leu	Lys	Glu	Lys
				965					970					975	
Asp	Ile	Ser	Leu	Thr	Asp	Ile	Gln	Asp	Leu	Ser	Ser	Ile	Ser	Tyr	Glu
			980					985					990		
Pro	Asp	Ser	Ser	Phe	Lys	Glu	Ala	Ser	Cys	Lys	Thr	Pro	Lys	Ile	Asn
		995]	1000				-	1005			
His	Ala	Pro	Thr	Ser	Val	Ser	Thr	Pro	Leu	Ser	Pro	Gly	Ser	Val	Ser
1	010]	1015					1020				
Ser	Ala	Ala	Ser	Gln	Tyr	Lys	Asp	Cys	Leu	Glu	Ser	Ile	Thr	Phe	Gln
1025	•				1030				-	1035					1040
Val	Lys	Thr	Glu	Phe	Ala	Ser	Cys	Trp	Asn	Ser	Gln	Glu	Phe	Ile	Gln
				1045					1050					1055	
Thr	Leu	Ser	Asp	Asp	Phe	Ile	Ser	Val	Arg	Glu	Arg	Ala	Lys	Lys	Leu
		-	1060]	1065					1070		
Asp	Ser	Leu	Leu	Thr	Ser	Ser	Glu	Thr	Pro	Pro	Ser	Arg	Leu	Thr	Gly
]	1075					1080					1085			
Leu	Lys	Arg	Leu	Ser	Ser	Phe	Ile	Gly	Ala	Gly	Ser	Pro	Ser	Leu	Val
1	.090				-	1095					1100				
Lys	Ala	Cys	Asp	Ser	Ser	Pro	Pro	His	Ala	Thr	Gln	Arg	Arg	Ser	Leu
1105	5				1110					1115					1120
Pro	Lys	Val	Glu	Ala	Phe	Ser	Gln	His	His	Ile	Asp	Glu	Leu	Pro	Pro
				1125					1130					1135	
Pro	Ser	Gln	Glu	Leu	Leu	Asp	Asp	Ile	Glu	Leu	Leu	Lys	Gln	Gln	Gln
			1140					1145					1150		
Gly	Ser	Ser	Thr	Val	Leu	His	Glu	Asn	Thr	Ala	Ser	Asp	Gly	Gly	Gly
		1155					1160					1165			
Thr	Δla	Aen	Aen	Gln	Ara	Hie	Len	Glu	Gla	Gln	Glu	Thr	Asn	Ser	

1170 1175 1180

<210> 3443

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3443

Met Ile Lys Glu Ser Ile Gln Gln Glu Glu Leu Thr Ile Leu Asn Met

1 5 10 15

Tyr Ala Pro Asn Thr Gly Glu Pro Arg Phe Thr Lys Gln Val Leu Arg

20 25 30

Asp Leu Gln Arg Asp Ser Gly Tyr His Thr Thr Ile Val Gly Asp Ile

35 40 45

Asn Thr Pro Leu Ser Ile Leu Asp His Leu Gly Arg Lys Leu Thr Arg

50 55 60

Lys Asp Leu Asn Thr Ala Leu Asp Gln Val Asn Leu Ile Asp Ile Tyr

65 70 75 80

Arg Thr Leu Gln His Glu Thr Thr Asp Tyr Ile Leu Phe Leu Val Ala

85 90 95

Tyr Asp Thr Leu Lys Leu Ile Thr Lys Leu Glu Leu Lys His Ser Ser

100 105 110

Ala Asn Ala Lys

115

<210> 3444

<211> 122°

<212> PRT

<213> Homo sapiens

<400> 3444

Met Thr Thr Pro Ile Leu Phe Phe Phe Ser Lys Ile Val Leu Ala Ile

1 5 10 15

Leu Ile Leu Val Pro Phe His Ile Lys Phe Arg Ile Ser Leu Ser Ile

20 25 30

Ser Thr Lys Arg Pro Ser Asp Thr Leu Leu Glu Ile Val Leu Lys Gln

35 40 45

Leu Thr Ser Leu Arg Gly Ile Asp Ile Phe Thr Ile Leu Gly Leu Ser

50 55 60

Ile His Glu Arg Ile Cys Leu Leu Ile Ile Trp Val Phe Phe Asn Phe

65 70 75 80

Phe Ile Ser Ile Leu His Phe Ser Ala Cys Arg Phe Tyr Thr Tyr Phe

85 90 95

Val Arg Phe Ile Ala Lys Phe Leu Gly Gly Ala Ile Ala Asn Ser Ile

100 105 110

Glu Phe Leu Met Leu Asn Ser Asn Tyr Tyr

115 120

<210> 3445

<211> 799

<212> PRT

<213> Homo sapiens

<400> 3445

Met Ala Leu Thr Thr Gly Lys His Glu Gly Tyr Val His Phe Gly Thr

1				5					10					15	
Ile	Arg	Asp	Gly	Gln	Val	Ser	Phe	Glu	Met	Leu	Pro	Arg	Gln	Trp	Ser
			20					25					30		
Val	Cys	Glu	Gln	Ile	Gly	Val	Thr	Thr	Cys	Ser	Ile	Ile	Trp	Ser	Glu
		35					40					45			
Tyr	Ile	Ala	Gly	Glu	Tyr	Thr	Leu	Leu	Leu	Leu	Val	Glu	Ser	Gly	Tyr
	50					55					60				
Gly	Asn	Ala	Ser	Lys	Arg	Phe	Gln	Val	Val	Ser	Tyr	Asn	Thr	Ala	Ser
65					70					75					80
Asp	Asp	Leu	Glu	Leu	Leu	Tyr	His	Ile	Pro	Glu	Phe	Ile	Pro	Glu	Ala
				85					90					95	
Arg	Gly	Leu	Glu	Phe	Leu	Met	Ile	Leu	Gly	Thr	Glu	Ser	Tyr	Thr	Ser
			100					105					110		
Thr	Ala	Met	Ala	Pro	Lys	Gly	Ile	Phe	Cys	Asn	Pro	Tyr	Asn	Asn	Leu
		115					120					125			
Ile	Phe	Ile	Trp	Gly	Asn	Phe	Leu	Leu	Gln	Ser	Ser	Asn	Lys	Glu	Asn
	130					135					140				
Phe	Ile	Tyr	Leu	Ala	Asp	Phe	Pro	Lys	Glu	Leu	Ser	Ile	Lys	Tyr	Met
145					150					155					160
Ala	Arg	Ser	Phe	Arg	Gly	Ala	Val	Ala	Ile	Val	Thr	Glu	Thr	Glu	Glu
				165					170					175	
Ile	Trp	Tyr	Leu	Leu	Glu	Gly	Ser	Tyr	Arg	Val	Tyr	Gln	Leu	Phe	Pro
			180					185					190		
Ser	Lys	Gly	Trp	Gln	Val	His	Ile	Ser	Leu	Lys	Leu	Met	Gln	Gln	Ser
		195					200					205			
Ser	Leu	Tyr	Ala	Ser	Asn	Glu	Thr	Met	Leu	Thr	Leu	Phe	Tyr	Glu	Asp
	210					215					220				
Ser	Lys	Leu	Tyr	Gln	Leu	Val	Tyr	Leu	Met	Asn	Asn	Gln	Lys	Gly	Gln
225					230					235					240

Leu	Val	Lys	Arg	Leu	Val	Pro	Val	Glu	Gln	Leu	Leu	Met	Tyr	Gln	Gln
				245					250					255	
His	Thr	Ser	His	Tyr	Asp	Leu	Glu	Arg	Lys	Gly	Gly	Tyr	Leu	Met	Leu
			260					265					270		
Ser	Phe	Ile	Asp	Phe	Cys	Pro	Phe	Ser	Val	Met	Arg	Leu	Arg	Ser	Leu
		275					280					285			
Pro	Ser	Pro	Gln	Arg	Tyr	Thr	Arg	Gln	Glu	Arg	Tyr	Arg	Ala	Arg	Pro
	290					295					300				
Pro	Arg	Val	Leu	Glu	Arg	Ser	Gly	Phe	His	Asn	Glu	Asn	Ser	Leu	Ala
305					310					315					320
Ile	Tyr	Gln	Gly	Leu	Val	Tyr	Tyr	Leu	Leu	Trp	Leu	His	Ser	Val	Tyr
				325					330					335	
Asp	Lys	Pro	Tyr	Ala	Asp	Pro	Val	His	Asp	Pro	Thr	Trp	Arg	Trp	Trp
			340					345					350		
Ala	Asn	Asn	Lys	Gln	Asp	Gln	Asp	Tyr	Tyr	Phe	Phe	Leu	Ala	Ser	Asn
		355					360					365			
Trp	Arg	Ser	Ala	Gly	Gly	Val	Ser	Ile	Glu	Met	Asp	Ser	Tyr	Glu	Lys
	370					375					380				
Ile	Tyr	Asn	Leu	Glu	Ser	Ala	Tyr	Glu	Leu	Pro	Glu	Arg	Ile	Phe	Leu
385					390					395					400
Asp	Lys	Gly	Thr	Glu	Tyr	Ser	Phe	Ala	Ile	Phe	Leu	Ser	Ala	Gln	Gly
				405					410					415	
His	Ser	Phe	Arg	Thr	Gln	Ser	Glu	Leu	Gly	Thr	Ala	Phe	Gln	Leu	His
			420					425					430		
Ser	Gln	Val	Asp	Val	Gly	Val	Val	Leu	Ala	Asp	Pro	Gly	Cys	Ile	Glu
		435					440					445			
Ala	Ser	Val	Lys	Gln	Glu	Val	Leu	Ile	Asn	Arg	Asn	Ser	Val	Leu	Phe
	450					455					460				
Ser	He	Thr	Leu	Lvs	Asn	Lvs	Lvs	Leu	Cvs	Tvr	Asp	Gln	Glv	He	Ser

465					470					475					480
Gly	His	His	Leu	Met	Glu	Thr	Ser	Met	Thr	Val	Asn	Val	Val	Gly	Ser
				485					490					495	
Ser	Gly	Leu	Cys	Phe	Gln	Glu	Thr	His	Leu	Gly	Pro	His	Met	Gln	Gly
			500					505					510		
Asn	Leu	Met	Val	Pro	Val	Phe	Ile	Gly	Cys	Pro	Pro	Gly	Lys	Arg	Leu
		515					520					525			
Ala	Phe	Asp	Ile	Thr	Tyr	Thr	Leu	Glu	Tyr	Ser	Arg	Leu	Lys	Asn	Lys
	530					535					540				
His	Tyr	Phe	Asp	Cys	Val	Asn	Val	Asn	Pro	Glu	Met	Pro	Cys	Phe	Leu
545					550					555					560
Phe	Arg	Asp	Ile	Phe	Tyr	Pro	Phe	Phe	Leu	Ile	Gln	Asp	Leu	Val	Thr
				565					570					575	
Gly	Asp	Ser	Gly	Ser	Phe	Arg	Gly	Ser	Tyr	Val	Leu	Leu	Val	Val	Gly
			580					585					590		
Gly	Gly	Pro	Thr	Leu	Asp	Ser	Leu	Lys	Asp	Tyr	Ser	Glu	Asp	Glu	Ile
		595					600					605			
Tyr	Arg	Phe	Asn	Ser	Pro	Leu	Asp	Lys	Thr	Asn	Ser	Leu	Ile	Trp	Thr
	610					615					620				
Thr	Arg	Thr	Thr	Arg	Thr	Thr	Lys	Asp	Ser	Ala	Phe	His	Ile	Met	Ser
625					630					635					640
His	Glu	Ser	Pro	Gly	Ile	Glu	Trp	Leu	Cys	Leu	Glu	Asn	Ala	Pro	Cys
				645					650					655	
Tyr	Asp	Asn	Val	Pro	Gln	Gly	Ile	Phe	Ala	Pro	Glu	Phe	Phe	Phe	Lys
			660					665					670		
Val	Leu	Val	Ser	Asn	Arg	Gly	Val	Asp	Thr	Ser	Thr	Tyr	Cys	Asn	Tyr
		675					680					685			
Gln	Leu	Thr	Phe	Leu	Leu	His	Ile	His	Gly	Leu	Pro	Leu	Ser	Pro	Lys
	690					695					700				

Arg Ala Leu Phe Ile Ile Met Val Ser Ala Ser Val Phe Val Gly Leu Val Ile Phe Tyr Ile Ala Phe Cys Leu Leu Trp Pro Leu Val Val Lys Gly Cys Thr Met Ile Arg Trp Lys Ile Asn Asn Leu Ile Ala Ser Glu Ser Tyr Tyr Thr Tyr Ala Ser Ile Ser Gly Ile Ser Ser Met Pro Ser Leu Arg His Ser Arg Met Gly Ser Met Phe Ser Ser Arg Met Thr Glu Asp Arg Ala Glu Pro Lys Glu Ala Val Glu Arg Gln Leu Met Thr

<210> 3446

<211> 392

<212> PRT

<213> Homo sapiens

<400> 3446

Met Val Leu Met Asp Ile Arg Arg Arg Leu Pro Ala Ile Cys Trp Phe Cys Lys Ser Glu Ala Pro Gly Arg Ala Glu Pro Gly Ile Gln Cys Ala Ile Pro Val His Gly Arg Pro Gly Gly Cys Pro Ala Pro Leu Ser Leu Gly Ser Asn Asp Pro Leu Leu Pro Gln Leu Leu Gln Met Glu Gln Val Arg Arg Ile Pro Glu Glu Tyr Ser Leu Gly Arg Met Ala Glu Gly Leu

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65					70					75					80
Ser	His	His	Asp	Pro	Ile	Met	Lys	Val	Leu	Ser	Ile	Arg	Gly	Leu	Val
				85					90					95	
Ile	Leu	Ala	Arg	Arg	Ser	Glu	Lys	Thr	Ala	Lys	Val	Lys	Ala	Leu	Leu
			100					105					110		
Pro	Ser	Met	Val	Lys	Gly	Leu	Lys	Asn	Met	Asp	Gly	Met	Leu	Val	Val
		115					120					125			
Glu	Ala	Val	His	Asn	Leu	Lys	Ala	Val	Phe	Lys	Gly	Arg	Asp	Gln	Lys
	130					135					140				
Leu	Met	Asp	Ser	Ala	Val	Tyr	Val	Glu	Met	Leu	Gln	Ile	Leu	Leu	Pro
145					150					155					160
His	Phe	Ser	Asp	Ala	Arg	Glu	Asp	Val	Arg	Ser	Ser	Cys	Ile	Asn	Leu
				165					170					175	
Tyr	Gly	Lys	Val	Val	Gln	Lys	Leu	Arg	Ala	Pro	Arg	Thr	Gln	Ala	Met
			180					185					190		
Glu	Glu	Gln	Leu	Val	Ser	Thr	Leu	Val	Pro	Leu	Leu	Leu	Thr	Met	Gln
		195					200					205			
Glu	Gly	Asn	Ser	Lys	Val	Ser	Gln	Lys	Cys	Val	Lys	Thr	Leu	Leu	Cys
	210					215					220				
Cys	Ser	Tyr	Phe	Met	Ala	Trp	Glu	Leu	Pro	Lys	Arg	Ala	Tyr	Ser	Arg
225					230					235					240
Lys	Pro	Trp	Asp	Asn	Gln	Gln	Gln	Thr	Val	Ala	Lys	Ile	Cys	Lys	Cys
				245					250					255	
Leu	Val	Asn	Thr	His	Arg	Asp	Ser	Ala	Phe	Ile	Phe	Leu	Ser	Gln	Ser
			260					265					270		
Leu	Glu	Tyr	Ala	Lys	Asn	Ser	Arg	Ala	Ser	Leu	Arg	Lys	Cys	Ser	Val
		275					280					285			
Met	Phe	Ile	Glÿ	Ser	Leu	Val	Pro	Cys	Met	Glu	Ser	Ile	Met	Thr	Glu
	290					295					300				

Asp Arg Leu Asn Glu Val Lys Ala Ala Leu Asp Asn Leu Arg His Asp Pro Glu Ala Ser Val Cys Ile Tyr Ala Ala Gln Val Gln Asp His Ile Leu Ala Ser Cys Trp Gln Asn Ser Trp Leu Pro His Gly Asn Ser Trp Val Cys Tyr Ser Ala Thr Thr His Arg Trp Ser Pro Ser Cys Glu Asn Leu Pro Thr Ser His Gln Arg Arg Ser Trp Ile Met Gln Ala Leu Gly Ser Trp Lys Met Ser Leu Lys Lys

<210> 3447

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3447

Met Ala Ile Gly Cys Phe Met Phe Arg Phe Pro Pro Trp Leu Gln Ser Leu Thr Glu Asn Leu Cys Ala Arg Pro Cys Ala Ala Ser Phe Thr His Ile Thr Val Leu Thr His Ser Gly Cys Phe Asn Lys Val Pro Ser Thr Gly Trp Leu Ile Asn Asn Thr Asn Gly Phe Leu Thr Val Leu Glu Thr Glu Ser Pro Arg Ser Glu Cys Gln His Gly Gly Ile Leu Val Gly Ala

Leu Leu Arg Val Ala Asp Cys Tyr Leu Leu Thr Met Ser Ser His Arg Gly Arg Gly Lys Arg Ala Leu <210> 3448 <211> 105 <212> PRT <213> Homo sapiens <400> 3448 Met Thr Asp Arg Phe Trp Asp Gln Trp Tyr Leu Trp Tyr Leu Arg Leu Leu Arg Leu Leu Asp Arg Ala Leu Ala Ser Leu Arg Gly Phe Gly Lys Asn Glu Ile Lys Leu Leu Met Glu Lys Met Ala Leu Gly Lys Pro Cys Tyr Thr Ala Gln Gly Val Phe Ile Ser Val Arg Asn Ser Leu Gly Val Pro Gly Asp Gln Tyr Gln Val Glu Ala Asp Ser Cys Thr Glu Gln Val Lys Gln Gly Pro Tyr Gln Gly Arg Asn Gln Arg Trp Arg Lys Pro Asn

Gln His Thr Leu Lys Ala Val Ser His

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<210> 3449

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3449

Met Pro Arg Arg Gln Pro Leu Ala Gln Asp Cys Ser Pro Phe Gln Ser

1 5 10 15

Trp Ser Ala Gly Pro Trp Leu Pro Gly Glu Arg Ser Lys Gly Leu Ala

20 25 30

Pro Cys Ile His Glu Ala Gln Leu Trp Gly Ala Val Pro Thr Leu Ser

35 40 45

Ala Ile Gly Pro Ala Lys Ala Ser Val Gln Leu Pro Arg Ala Ser Leu

50 55 60

Cys Pro Ala Pro Gln Pro Ala Ser Leu Gln Arg Tyr Leu Leu Lys Ser

65 70 75 80

Pro His Pro Thr Leu Gln Leu Cys Ile Cys Phe Gln Glu Thr His Pro

85 90 95

Arg Thr Val Ser Ser Gly Ser Gly Pro Gly Arg Pro Thr Pro Lys Ala

100 105 110

Asp Val Gly Ala Gly Ser Leu Thr Ser Pro Gly Ala Met Glu Thr Arg

115 120 125

His Ser Trp Glu Met Glu Thr Gly Glu Leu Trp Val Leu Pro Arg His

130 135 140

Lys Arg

145

<210> 3450

<211> 259

<212> PRT

<213> Homo sapiens

<400> 3450

Met Ser Gln Gly Pro Lys Thr Leu Val Lys Glu Trp Arg Ser Gln His

1 5 10 15

Trp Ser Ala Arg Gly Glu Trp Glu Leu Asp Gly Leu Ala Leu Gly Trp
20 25 30

Thr His Gly Leu Gln Pro Gln Leu Ser Cys Ala Val Glu Pro Ser Ser

35 40 45

His Leu Gly Met Ser Cys Pro Leu Arg Leu Pro Gly Ala Gly Arg Pro
50 55 60

Pro Arg Cys Arg Arg Ala Leu Lys Gly Phe Arg Gly Ser Leu Cys Arg 65 70 75 80

Arg Gly Gln Arg Leu Ser Val Ala Ala Glu Gly Cys Gly Gly Pro Gly
85 90 95

Trp Ile Ala Asp Ser Arg Leu Asp Arg Arg Phe Gly Ile Ala Asp Trp
100 105 110

Gly Leu Asp Trp Gly Phe Gly Val Gly Ser Gly Met Trp Gly Leu Asp 115 120 125

Arg Gly Phe Glu Asp Trp IIe Gly Asp Leu Gly Leu Asp Pro Gly Phe
130 135 140

Gly Ala Gly Ser Ala Val Gly Gly Ser Glu Lys Val Thr Glu Ser Ser 145 150 155 160

Pro Cys Ser Gly Ala Gly Gly Trp Gly Ser Glu Lys Ser Pro Pro Pro 165 170 175

Arg Ser Ser Ser Ala Ser Gly Ala Ala Gly Ala Arg Trp Pro Gly Leu 180 185 190 His Arg Pro Arg Leu His Gly Ser Gly Tyr Arg Ile Arg Asp Ala Glu 195 200 205 Gln Arg Lys Ile Gln Gly Arg Leu Ser Arg Thr Gly Gly Gly Ala Arg 210 215 220 Pro Gly Ala Gln Glu Pro Glu Thr Trp Arg Pro Gly Thr Ser Ser Thr 230 235 225 240 Glu Leu Leu Tyr Ile Trp Pro Val Pro Ala Ala Met Trp Lys Trp Ser 245 250 255

Leu Ser Trp

<210> 3451

<211> 952

<212> PRT

<213> Homo sapiens

<400> 3451

Met Gly Gln Ile Cys Gln Arg Glu Ser Arg Gln Gly Leu Ala Met Leu 1 5 10 15

Pro Arg Leu Phe Leu Asn Pro Trp Arg Gln Val IIe Leu Leu Pro Gln
20 25 30

Pro Pro Lys Val Leu Gly Leu Gln Ala Thr Ala Ala Glu Lys Pro Lys
35 40 45

Leu His Leu Leu Ala Glu Ser Glu Ile Asp Lys Tyr Leu Tyr Ala Met
50 55 60

Arg Leu Ser Asp Glu Thr Leu Ile Asp Ile Met Thr Arg Phe Arg Lys
65 70 75 80

Glu Met Lys Asn Gly Leu Ser Arg Asp Phe Asn Pro Thr Ala Thr Val

				85					90					95	
Lys	Met	Leu	Pro	Thr	Phe	Val	Arg	Pro	Ile	Pro	Asp	Gly	Ser	Glu	Lys
			100					105					110		
Gly	Asp	Phe	Ile	Ala	Leu	Asp	Leu	Gly	Gly	Ser	Ser	Phe	Arg	Ile	Leu
		115					120					125			
Arg	Val	Gln	Val	Asn	His	Glu	Lys	Asn	Gln	Asn	Val	His	Met	Glu	Ser
	130					135					140				
Glu	Val	Tyr	Asp	Thr	Pro	Glu	Asn	Ile	Val	His	Gly	Ser	Gly	Ser	Gln
145					150					155					160
Leu	Phe	Asp	His	Val	Ala	Glu	Cys	Leu	Gly	Asp	Phe	Met	Glu	Lys	Arg
				165					170					175	
Lys	Ile	Lys	Asp	Lys	Lys	Leu	Pro	Val	Gly	Phe	Thr	Phe	Ser	Phe	Pro
			180					185					190		
Cys	Gln	Gln	Ser	Lys	Ile	Asp	Glu	Ala	Ile	Leu	Ile	Thr	Trp	Thr	Lys
		195					200					205			
Arg	Phe	Lys	Ala	Ser	Gly	Val	Glu	Gly	Ala	Asp	Val	Val	Lys	Leu	Leu
	210					215					220				
Asn	Lys	Ala	Ile	Lys	Lys	Arg	Gly	Asp	Tyr	Asp	Ala	Asn	Ile	Val	Ala
225					230					235					240
Val	Val	Asn	Asp	Thr	Val	Gly	Thr	Met	Met	Thr	Cys	Gly	Tyr	Asp	Asp
				245					250					255	
Gln	His	Cys	Glu	Val	Gly	Leu	Ile	Ile	Gly	Thr	Gly	Thr	Asn	Ala	Cys
			260					265					270		
Tyr	Met	Glu	Glu	Leu	Arg	His	Ile	Asp	Leu	Val	Glu	Gly	Asp	Glu	Gly
		275					280					285			
Arg	Met	Cys	Ile	Asn	Thr	Glu	Trp	Gly	Ala	Phe	Gly	Asp	Asp	Gly	Ser
	290					295					300				
Leu	Glu	Asp	Ile	Arg	Thr	Glu	Phe	Asp	Arg	Glu	Ile	Asp	Arg	Gly	Ser
305					310					315					320

Leu	Asn	Pro	Gly	Lys	Gln	Leu	Phe	Glu	Lys	Met	Val	Ser	Gly	Met	Туі
				325					330					335	
Leu	Gly	Glu	Leu	Val	Arg	Leu	Ile	Leu	Val	Lys	Met	Ala	Lys	Glu	Gly
			340					345					350		
Leu	Leu	Phe	Glu	Gly	Arg	Ile	Thr	Pro	Glu	Leu	Leu	Thr	Arg	Gly	Lys
		355					360					365			
Phe	Asn	Thr	Ser	Asp	Val	Ser	Ala	Ile	Glu	Lys	Asn	Lys	Glu	Gly	Leu
	370					375					380				
His	Asn	Ala	Lys	Glu	Ile	Leu	Thr	Arg	Leu	Gly	Val	Glu	Pro	Ser	Asp
385					390					395					400
Asp	Asp	Cys	Val	Ser	Val	Gln	His	Val	Cys	Thr	Ile	Val	Ser	Phe	Arg
				405					410					415	
Ser	Ala	Asn	Leu	Val	Ala	Ala	Thr	Leu	Gly	Ala	Ile	Leu	Asn	Arg	Leu
			420					425					430		
Arg	Asp	Asn	Lys	Gly	Thr	Pro	Arg	Leu	Arg	Thr	Thr	Val	Gly	Val	Ası
		435					440					445			
Gly	Ser	Leu	Tyr	Lys	Thr	His	Pro	Gln	Tyr	Ser	Arg	Arg	Phe	His	Lys
	450					455					460				
Thr	Leu	Arg	Arg	Leu	Val	Pro	Asp	Ser	Asp	Val	Arg	Phe	Leu	Leu	Sei
465					470					475					480
Glu	Ser	Gly	Ser	Gly	Lys	Gly	Ala	Ala	Met	Val	Thr	Ala	Val	Ala	Ty
				485					490					495	
Arg	Leu	Ala	Glu	Gln	His	Arg	Gln	Ile	Glu	Glu	Thr	Leu	Ala	His	Phe
			500					505					510		
His	Leu	Thr	Lys	Asp	Met	Leu	Leu	Glu	Val	Lys	Lys	Arg	Met	Arg	Ala
		515					520					525			
Glu	Met	Glu	Leu	Gly	Leu	Arg	Lys	Gln	Thr	His	Asn	Asn	Ala	Val	Va
	530					535					540				
Lve	Met	Len	Pro	Ser	Phe	Val	Aro	Ara	Thr	Pro	Asn	Glv	Thr	Glu	Ası

545					550					555					560
Gly	Asp	Phe	Leu	Ala	Leu	Asp	Leu	Gly	Gly	Thr	Asn	Phe	Arg	Val	Leu
				565					570					575	
Leu	Val	Lys	Ile	Arg	Ser	Gly	Lys	Lys	Arg	Thr	Val	Glu	Met	His	Asn
			580					585					590		
Lys	Ile	Tyr	Ala	Ile	Pro	Ile	Glu	Ile	Met	Gln	Gly	Thr	Gly	Glu	Glu
		595					600					605			
Leu	Phe	Asp	His	Ile	Val	Ser	Cys	Ile	Ser	Asp	Phe	Leu	Asp	Tyr	Met
	610					615					620				
Gly	Ile	Lys	Gly	Pro	Arg	Met	Pro	Leu	Gly	Phe	Thr	Phe	Ser	Phe	Pro
625					630					635					640
Cys	Gln	Gln	Thr	Ser	Leu	Asp	Ala	Gly	Ile	Leu	Ile	Thr	Trp	Thr	Lys
				645					650					655	
Gly	Phe	Lys	Ala	Thr	Asp	Cys	Val	Gly	His	Asp	Val	Val	Thr	Leu	Leu
			660					665					670		
Arg	Asp	Ala	Ile	Lys	Arg	Arg	Glu	Glu	Phe	Asp	Leu	Asp	Val	Val	Ala
		675					680					685			
Val	Val	Asn	Asp	Thr	Val	Gly	Thr	Met	Met	Thr	Cys	Ala	Tyr	Gly	Glu
	690					695					700				
Pro	Thr	Cys	Glu	Val	Gly	Leu	Ile	Val	Gly	Thr	Gly	Ser	Asn	Ala	Cys
705					710					715					720
Tyr	Met	Glu	Glu	Met	Lys	Asn	Val	Glu	Met	Val	Glu	Gly	Asp	Gln	Gly
				725					730					735	
Gln	Met	Cys	Ile	Asn	Met	Glu	Trp	Gly	Ala	Phe	Gly	Asp	Asn	Gly	Cys
			740					745					750		
Leu	Asp	Asp	Ile	Arg	Thr	His	Tyr	Asp	Arg	Leu	Val	Asp	Glu	Tyr	Ser
		755					760					765			
Leu	Asn	Ala	Gly	Lys	Gln	Arg	Tyr	Glu	Lys	Met	Ile	Ser	Gly	Met	Tyr
	770					775					780				

Leu Gly Glu Ile Val Arg Asn Ile Leu Ile Asp Phe Thr Lys Lys Gly Phe Leu Phe Arg Gly Gln Ile Ser Glu Thr Leu Lys Thr Arg Gly Ile Phe Glu Thr Lys Phe Leu Ser Gln Ile Glu Ser Asp Arg Leu Ala Leu Leu Gln Val Arg Ala Ile Leu Gln Gln Leu Gly Leu Asn Ser Thr Cys Asp Asp Ser Ile Leu Val Lys Thr Val Cys Gly Val Val Ser Arg Arg Ala Ala Gln Leu Cys Gly Ala Gly Met Ala Ala Val Val Asp Lys Ile Arg Glu Asn Arg Gly Leu Asp Arg Leu Asn Val Thr Val Gly Val Asp Gly Thr Leu Tyr Lys Leu His Pro His Phe Ser Arg Ile Met His Gln Thr Val Lys Glu Leu Ser Pro Lys Cys Asn Val Ser Phe Leu Leu Ser Glu Asp Gly Ser Gly Lys Gly Ala Ala Leu Ile Thr Ala Val Gly Val Arg Leu Arg Thr Glu Ala Ser Ser

<210> 3452

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3452

Met Lys Glu Thr Trp Glu Met Leu Pro Gly Lys Pro Gly Ile Trp Ala

1 5 10 15

Leu Asp His Phe Gly Val Asn Leu Pro Ser Ala His Pro Ser Phe Gly

20 25 30

Gly Ser Trp Gly Glu Glu Lys Cys Ser Arg Thr Met Arg Phe Ala Ala

35 40 45

Ser Gln Gly Lys Leu Asp Leu Asn Gly Tyr Gln Lys Ser Gly Ala Ser

50 55 60

Ser Trp Arg Lys Ala Ala Arg Gly Leu Arg Leu Gln Gly Gly Leu Arg

65 70 75 80

Ser Thr Ala Pro Ser Leu Ser Leu Ser Tyr Pro Val Ala Ser Ser Ile

85 90 95

Pro Ala Gly Arg Leu His Phe Leu Ser Leu Pro Pro Thr Ala Gly Leu

100 105 110

Leu Leu Phe Gly Asp Arg Ile Ser Leu Cys Arg Pro Gly Trp Ser

115 120 125

Ala Val Ala Arg Ser Arg Leu Thr Ala Thr Ser Ala Ser Arg Val Glu

130 135 140

Ala Ile Leu Leu Pro Gln Pro Pro Glu

145 150

<210> 3453

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3453

Met Gly Gly Ser Gly Arg Cys Leu Gly Arg Val Glu Ile Leu His Gln Gly Ala Trp Gly Thr Val Cys Asp Asp Leu Trp Asp Leu Asn Glu Ala Lys Val Val Cys Arg Gln Leu Gly Phe Gly Gln Ala Val Ser Gly Pro Gly Glu Ala His Phe Gly Pro Gly Ser Gly Asp Ile Phe Leu Asp Asn Leu Gln Cys Thr Arg Val Glu His Tyr Leu Gly Gln Cys Thr His Leu Gly Trp Ser Glu His Asn Cys Gly His His Glu Asp Ala Ser Val Ile Cys Ser Asp Ala Glu Asp Leu Pro Pro Pro Thr Pro Pro Asp Ser Ser Thr Ala Ser Gln Asp His Ile Lys Gly Gly Ser Asn Ser Cys Gly Gly Val Ile Ser Ser Leu Ser Gly Ser Phe Ser Ser Pro Gln Tyr Pro Glu Asn Tyr Pro Thr Asp Ile Gln Cys Val Trp Glu Ile His Met Gly Ala Lys Phe His Ile Glu Leu Ile Ile Pro Ser Leu Lys Val Ile Gln Ser Lys Asp Arg Arg Leu Cys His Leu His

<210> 3454

<211> 679

<212> PRT

<213> Homo sapiens

<400> 3454

Met Leu Ser Met Glu Asn Val Gly Asn Tyr Gln Gly Tyr Ser Gln Glu

1 5 10 15

Thr Ala Pro Lys Asp His Leu Leu His Asp Pro Glu Thr Ser Ser Asp
20 25 30

Glu Asp Leu Arg Ser Asn Ser Glu Arg Asp Leu Glu Thr His Met Met
35 40 45

His Leu Ser Gly Asn Asp Ser Gly Val Arg Leu Gly Gln Lys Gln Leu 50 55 60

Glu Asn Ala Leu Thr Val Arg Leu Ser Lys Lys Phe Glu Lys Ile Asn 65 70 75 80

Glu Gly Arg Met Pro Gly Thr Val His Ser Ser Trp His Ser Val Lys
85 90 95

Gln Thr Met Ser Leu Pro Glu Lys Ser Gln Ser Gln Ile Lys His Gln
100 105 110

Asn Leu Val Ala Leu Val Ser Glu Asp His Cys Val Asp Thr Ser Gln
115 120 125

Glu Ile Ser Phe Leu Ser Ser Asn Lys Gln Lys Met Leu Glu Ala His 130 135 140

Ile Lys Thr Phe Arg Met Arg Met Leu Trp Gly Leu Pro Cys Lys Val 145 150 155 160

Leu Glu Ser Ile Glu Ile Phe Lys Ser Glu Glu Asp Ile Ser Asn Ser 165 170 175

Phe Ser His Phe Tyr Leu Pro Ser Ser Ala Ser Phe Ile Ser Gln Gly
180 185 190

Asp Ser Lys Asp Gly Val Ser Lys Ser Cys Arg Arg Ser Thr Phe Gln
195 200 205

Gly	Glu	Lys	Leu	Gly	Thr	Thr	Ser	Ser	Val	Pro	Val	Leu	Asn	His	Pro
	210					215					220				
Gln	Pro	Val	Ser	Ser	Pro	Ile	Gly	Lys	Glu	Gly	Gln	Gly	Thr	Leu	Arg
225					230					235					240
Arg	Gln	Phe	Ser	Asp	Ile	Asp	His	Asp	Leu	Ile	Glu	Thr	Asp	Ala	Lys
				245					250					255	
Asp	Gly	Ala	Ser	Thr	Pro	Leu	Arg	Arg	Gly	Thr	Thr	Tyr	Phe	Gln	Gly
			260					265					270		
Glu	Lys	Leu	Glu	Thr	Thr	Ser	Ser	Phe	Ser	Ile	Leu	Gly	His	Pro	His
		275					280					285			
Leu	Val	Thr	Ser	Pro	Val	Asp	Gln	Glu	Lys	Gln	Gly	Thr	Leu	Arg	Arg
	290					295					300				
Glu	Phe	Ala	Asp	Thr	Asp	Glu	Asp	Leu	Thr	Glu	Ser	Val	Trp	Thr	Thr
305					310					315					320
Glu	Asp	Gly	Arg	Gln	Thr	Phe	Leu	Pro	Pro	Thr	Tyr	Ser	Ile	Ile	Asp
				325					330					335	
Glu	Val	Ser	Gln	Lys	Gln	Thr	Val	Leu	Ala	Ser	Arg	Cys	Ser	Ala	Glu
			340					345					350		
Leu	Pro	Ile	Leu	Gln	Ala	Gly	Val	Gly	Arg	Asp	Ser	Arg	Asp	Lys	Arg
		355					360					365			
Glu	Ser	Ala	Ser	Asn	Asn	Val	Asn	Arg	Leu	Gln	Gly	Ser	Gly	Lys	Thr
	370					375					380				
Phe	Pro	Val	Thr	Asn	Gly	Ser	Lys	Glu	Met	Phe	Lys	Glu	Glu	Glu	Ιlϵ
385					390					395					400
Cys	Thr	Leu	Gln	Ser	Gln	Thr	Arg	Asn	Asn	Leu	Thr	Thr	Ser	Lys	Ser
				405					410					415	
Gly	Ser	Cys	Leu	Val	Thr	Asn	Val	Lys	Arg	Ser	Thr	Ser	His	Glu	Thi
			420					425					430		
Glu	Ile	Phe	Pro	Pro	Arg	Ile	Ser	Val	Pro	Gln	Thr	Pro	Lys	Ser	Ser

		435					440					445			
Tyr	Leu	Lys	Asn	Gln	Met	Leu	Ser	Gln	Leu	Lys	Leu	Val	Gln	Arg	Lys
	450					455					460				
His	Ser	Gln	Pro	Gln	Ser	His	Phe	Thr	Gly	Met	Ser	Leu	Ala	Leu	Asp
465					470					475					480
Asn	Leu	Ser	Ser	Lys	Asp	Leu	Leu	Thr	His	Ala	Gln	Gly	Ile	Ser	Asn
				485					490					495	
Gln	Asp	Leu	Gly	Thr	Ser	Gln	Val	Leu	His	Val	His	Leu	Glu	Val	Arg
			500					505					510		
Gly	Ile	Arg	Val	Ala	Gln	Gln	Gln	Glu	His	Arg	Val	Pro	Thr	His	Val
		515					520					525			
Leu	Gln	Lys	Cys	Gln	Val	Lys	Asn	Phe	Ser	Pro	Ala	Ala	Lys	Arg	Val
	530					535					540				
Ser	Pro	Leu	Arg	Pro	Asn	Gly	Gly	Glu	Leu	Gly	Gly	Gly	Asp	Ala	Gly
545					550					555					560
Leu	Gly	Thr	Ser	Gln	Leu	Thr	Arg	Lys	Ser	Leu	Pro	Val	His	Asn	Lys
				565					570					575	
Ala	Ser	Gly	Glu	Val	Pro	Gly	Ser	Lys	Ser	Ser	Pro	Thr	Leu	Lys	Thr
			580					585					590		
Gln	Pro	Pro	Ser	Glu	Asn	Leu	Phe	Arg	Lys	Trp	Met	Gln	Thr	Leu	Leu
		595					600					605			
Gln	Trp	Phe	Asn	Lys	Pro	Ser	Ile	Met	Cys	Glu	Glu	Gln	Glu	Ser	Ser
	610					615					620				
Trp	Glu	Lys	Gly	Ser	Ser	Leu	Ser	Ser	Ser	Val	Gln	Asn	Arg	Ser	Arg
625					630					635					640
Val	Thr	Ser	Arg	Ala	Ala	Phe	Thr	Gly	Ala	Thr	Glu	Ala	Gln	Lys	Ιle
				645					650					655	
Arg	Lys	Asp	Thr	Gly	Glu	Phe	Leu	Glu	Glu	Lys	Leu	Gly	His	Ser	His
			660					665					670		

Gly Ile Asp Ile Thr Cys Pro 675

<210> 3455

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3455

Met Gly Arg Leu Ala Gly Arg Arg Ala Asn Pro Pro His Leu Pro Pro

1 5 10 15

Gly Arg Gly Gly Cys Trp Ala Glu Thr Leu Leu Thr Ser Gln Met Gly

20 25 30

Trp Leu Pro Gly Gly Glu Ala Pro His Phe Ser Asp Gly Ala Ala Ala

35 40 45

Gly Arg Arg Gly Ser Ser Leu Leu Arg Arg Gly Gly Cys Gln Ala Glu

50 55 60

Gly Leu Leu Thr Ser Gln Thr Gly Arg Pro Gly Arg Asp Ala Pro His

65 70 75 80

Leu Pro Asp Gly Val Ser Ala Gly Gln Arg Arg Ser Ser His Pro Arg

85 90 95

Trp Gly Gly Gly Ala Glu Ala Leu Pro Thr Ser Gln Thr Met Gly Gly

100 105 110

Arg Ala Glu Thr Leu Leu Thr Ser

115 120

<210> 3456

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3456

Met Val Gln Ala Ser Gly His Arg Arg Ser Thr Arg Gly Ser Lys Met

1 5 10 15

Val Ser Trp Ser Val Ile Ala Lys Ile Gln Glu Ile Trp Cys Glu Glu

20 25 30

Asp Glu Arg Lys Met Ala Arg Glu Phe Leu Ala Glu Phe Met Ser Thr

35 40 45

Tyr Val Met Met Glu Trp Leu Thr Gly Met Leu Gln Leu Cys Leu Phe

50 55 60

Ala Ile Val Asp Gln Glu Asn Asn Pro Ala Leu Pro Gly Thr His Ala

65 70 75 80

Leu Val Ile Gly Ile Leu Val Val Ile Ile Arg Val Tyr His Gly Met

85 90 95

Asn Thr Gly Tyr Ala Ile Asn Pro Ser Arg Asp Leu Pro Pro Pro His

100 105 110

Leu His Leu His Cys Trp Leu Gly Gln Thr Gly Leu Gln Val Leu Pro

115 120 125

Leu Pro Arg Pro Ile Pro Leu Arg Phe Ser Val Gly Pro Leu Cys Val

130 135 140

Glu Val Trp Gly Val Met

145 150

<210> 3457

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3457

Met Gly Pro Gly Ile Val Leu Val Ser Ser His Gly Lys Met Leu Asp

1 5 10 15

Leu Thr Met Thr Arg Ala Ala Lys Ile Gly Leu Tyr Leu Ser Glu Pro

20 25 30

Ile Glu Ser Ser Thr Ser Thr Thr Arg Gly Phe Tyr Cys Leu Ser Gln

35 40 45

Leu Gln Gln His Asn Met Arg Gln Gly Pro Arg Thr Ala Glu Leu Cys

50 55 60

Thr Val Phe Arg Arg Gly Cys Glu Leu Leu Cys Arg Val Gly Arg

65 70 75 80

Cys Phe Arg Ala Leu Gln Ala Pro Cys Arg Pro Leu Leu Thr Val His

85 90 95

Gly Leu His Leu Pro Tyr Leu Leu Ser Cys Pro Ile Ser Cys Ser Trp

100 105 110

Leu Trp Phe Pro Glu Gly Ser Arg Leu His Arg Leu Pro Cys Val Leu

115 120 125

Thr Leu Trp Trp Val Cys Lys Trp Gln Ser Pro Gly Lys Glu Thr Gly

130 135 140

Glu His Gly His Gly Ser Ser Gly Gly His Gly Gly Phe Arg Leu Pro

145 150 155 160

Pro Arg Ser Thr Cys Phe Ile Ser Ser Gly His Gln Asp Cys Ile Thr

165 170 175

Arg Thr Met Thr Thr Leu Arg Ala Leu Leu Gln Leu Lys Thr

180 185 190

<210> 3458

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3458

Met Arg Thr Pro Tyr Thr Thr Ser Leu Thr Arg Thr Pro His Thr Thr

1 5 10 15

Ser Leu Thr Arg Ile Leu Tyr Thr Thr Ser Leu Thr Arg Pro Pro Thr
20 25 30

Arg Ala Ser Pro Thr Arg Met Pro Pro Arg Ala Ser Pro Thr Arg Thr
35 40 45

Pro Pro Arg Ala Ser Pro Arg Arg Thr Pro Pro Arg Ala Ser Pro Arg 50 55 60

Arg Thr Pro Pro Arg Ala Ser Leu Thr Arg Pro Pro Thr Arg Ala Pro 65 70 75 80

Pro Thr Arg Met Pro Pro Thr Ala Pro Pro Thr Arg Thr Pro Pro Thr

85 90 95

Ala Ser Pro Ala Arg Thr Pro Pro Thr Glu Ser Pro Ala Arg Thr Pro 100 105 110

Pro Thr Ala Ser Pro Ala Arg Thr Pro Pro Arg Ala Ser Pro Thr Arg
115 120 125

Thr Pro Pro Arg Ala Ser Pro Arg Arg Thr Pro Ser Thr Ala Ser Pro 130 135 140

Thr Arg Thr Pro Pro Arg Ala Ser Pro Arg Arg Thr Pro Pro Arg Ala 145 150 155 160

Ser Pro Thr Arg Thr Pro Pro Arg Ala Ser Pro Lys Arg Thr Pro Pro 165 170 175 Arg Ala Ser Pro Arg Arg Thr Pro Pro Arg Ala Ser Pro Thr Arg Ala 190 180 185 Pro Pro Arg Ala Ser Pro Lys Arg Thr Pro Pro Thr Ala Ser Pro Thr 200 205 195 Arg Thr Pro Pro Arg Ala Ser Pro Thr Arg Thr Pro Pro Thr Glu Ser 220 215 210 Pro Ala Arg Thr Pro Pro Arg Ala Ser Pro Thr Arg Thr Pro Pro Thr 235 225 230 240 Glu Ser Pro Ala Arg Thr Pro Ser Arg Ala Ser Thr Arg Arg Thr Pro 245 250 255 Pro Arg Ala Ser Pro Thr Arg Thr Pro Pro Arg Ala Ser Pro Lys Arg 270 260 265 Thr Pro Pro Thr Ala Ser Pro Thr Ser Cys Ile Arg His Arg 275 280 285

<210> 3459

<211> 1172

<212> PRT

<213> Homo sapiens

<400> 3459

Met Phe Gly Pro Ser Val Glu Phe Thr Ser Val Leu Lys Pro Val Phe

1 5 10 15

Ala Arg Glu Lys Glu Pro Phe Ser Leu Ser Cys Leu Phe Ser Glu Asp

20 25 30

Val Leu Asp Ala Glu Ser Ile Gln Trp Phe Arg Asp Gly Ser Leu Leu
35 40 45

Arg Ser Ser Arg Arg Lys Ile Leu Tyr Thr Asp Arg Gln Ala Ser

	50					55					60				
Leu	Lys	Val	Ser	Cys	Thr	Tyr	Lys	Glu	Asp	Glu	Gly	Leu	Tyr	Thr	Val
65					70					75					80
Arg	Val	Pro	Ser	Pro	Phe	Gly	Pro	Arg	Glu	Gln	Ser	Thr	Tyr	Val	Leu
				85					90					95	
Val	Arg	Asp	Ala	Glu	Ala	Glu	Asn	Pro	Gly	Ala	Pro	Gly	Ser	Pro	Leu
			100					105					110		
Asn	Val	Arg	Cys	Leu	Asp	Val	Asn	Arg	Asp	Cys	Leu	Ile	Leu	Thr	Trp
		115					120					125			
Ala	Pro	Pro	Ser	Asp	Thr	Arg	Gly	Asn	Pro	Ile	Thr	Ala	Tyr	Thr	Ile
	130					135					140				
Glu	Arg	Cys	Gln	Gly	Glu	Ser	Gly	Glu	Trp	Ile	Ala	Cys	His	Glu	Ala
145					150					155					160
Pro	Gly	Gly	Thr	Cys	Arg	Cys	Pro	Ile	Arg	Gly	Leu	Val	Glu	Gly	Gln
				165					170					175	
Ser	Tyr	Arg	Phe	Arg	Val	Arg	Ala	Ile	Ser	Arg	Val	Gly	Ser	Ser	Val
			180					185					190		
Pro	Ser	Lys	Ala	Ser	Glu	Leu	Val	Val	Met	Gly	Asp	His	Asp	Ala	Ala
		195					200					205			
Arg	Arg	Lys	Thr	Glu	Ile	Pro	Phe	Asp	Leu	Gly		Lys	Ile	Thr	Ile
	210					215				_	220				
	Thr	Asp	Ala	Phe		Asp	Thr	Val	Thr		Pro	Ser	Pro	Pro	
225				_	230					235					240
Asn	Val	His	Ala		Glu	Ile	Arg	Glu		Tyr	Val	Val	Leu		Trp
			_	245					250	_		_		255	۵.
Glu	Glu	Pro		Pro	Arg	Gly	Arg		Pro	Leu	Thr	Tyr		Leu	Glu
_			260					265	٥.				270	0.	0
Lys	Ser	Val	He	Gly	Ser	Gly		Trp	Glu	Ala	He		Ser	Glu	Ser
		275					280					285			

Pro	Val	Arg	Ser	Pro	Arg	Phe	Ala	Val	Leu	Asp	Leu	Glu	Lys	Lys	Lys
	290					295					300				
Ser	Tyr	Val	Phe	Arg	Val	Arg	Ala	Met	Asn	Gln	Tyr	Gly	Leu	Ser	Asp
305					310					315					320
Pro	Ser	Glu	Pro	Ser	Glu	Pro	Ile	Ala	Leu	Arg	Gly	Pro	Pro	Ala	Thr
				325					330					335	
Leu	Pro	Pro	Pro	Ala	Gln	Val	Gln	Ala	Phe	Arg	Asp	Thr	Gln	Thr	Ser
			340					345					350		
Val	Ser	Leu	Thr	Trp	Asp	Pro	Val	Lys	Asp	Pro	Glu	Leu	Leu	Gly	Tyr
		355					360					365			
Tyr	Ile	Tyr	Ser	Arg	Lys	Val	Gly	Thr	Ser	Glu	Trp	Gln	Thr	Val	Asn
	370					375					380				
Asn	Lys	Pro	Ile	Gln	Gly	Thr	Arg	Phe	Thr	Val	Pro	Arg	Leu	Arg	Thr
385					390					395					400
Gly	Lys	Glu	Tyr	Glu	Phe	Cys	Val	Arg	Ser	Val	Ser	Glu	Ala	Gly	Val
				405					410					415	
Gly	Glu	Ser	Ser	Ala	Ala	Thr	Glu	Pro	Ile	Arg	Val	Lys	Gln	Ala	Leu
			420					425					430		
Ala	Thr	Pro	Ser	Ala	Pro	Tyr	Gly	Phe	Ala	Leu	Leu	Asn	Cys	Gly	Lys
		435					440					445			
Asn	Glu	Met	Val	Ile	Gly	Trp	Lys	Pro	Pro	Lys	Arg	Arg	Gly	Gly	Gly
	450					455					460				
Lys	Ile	Leu	Gly	Tyr	Phe	Leu	Asp	Gln	His	Asp	Ser	Glu	Glu	Leu	Asp
465					470					475					480
Trp	His	Ala	Val	Asn	Gln	Gln	Pro	Ile	Pro	Thr	Arg	Val	Cys	Lys	Val
				485					490					495	
Ser	Asp	Leu	His	Glu	Gly	His	Phe	Tyr	Glu	Phe	Arg	Ala	Arg	Ala	Ala
			500					505					510		
Asņ	Trp	Ala	Gly	Val	Gly	Glu	Leu	Ser	Ala	Pro	Ser	Ser	Leu	Phe	Glu

		515					520					525			
Cys	Lys	Glu	Trp	Thr	Met	Pro	Gln	Pro	Gly	Pro	Pro	Tyr	Asp	Val	Arg
	530					535					540				
Ala	Ser	Glu	Val	Arg	Ala	Thr	Ser	Leu	Val	Leu	Gln	Trp	Glu	Pro	Pro
545					550					555					560
Leu	Tyr	Met	Gly	Ala	Gly	Pro	Val	Thr	Gly	Tyr	His	Val	Ser	Phe	Gln
				565					570					575	
Glu	Glu	Gly	Ser	Glu	Gln	Trp	Lys	Pro	Val	Thr	Pro	Gly	Pro	Ile	Ser
			580					585					590		
Gly	Thr	His	Leu	Arg	Val	Ser	Asp	Leu	Gln	Pro	Gly	Lys	Ser	Tyr	Val
		595					600					605			
Phe	Gln	Val	Gln	Ala	Met	Asn	Ser	Ala	Gly	Leu	Gly	Gln	Pro	Ser	Met
	610					615					620				
Pro	Thr	Asp	Pro	Val	Leu	Leu	Glu	Asp	Lys	Pro	Gly	Ala	His	Glu	Ile
625					630					635					640
Glu	Val	Gly	Val	Asp	Glu	Glu	Gly	Phe	Ile	Tyr	Leu	Ala	Phe	Glu	Ala
				645					650					655	
Pro	Glu	Ala	Pro	Asp	Ser	Ser	Glu	Phe	Gln	Trp	Ser	Lys	Asp	Tyr	Lys
			660					665					670		
Gly	Pro	Leu	Asp	Pro	Gln	Arg	Val	Lys	Ile	Glu	Asp	Lys	Val	Asn	Lys
		675					680					685			
Ser	Lys	Val	Ile	Leu	Lys	Glu	Pro	Gly	Leu	Glu	Asp	Leu	Gly	Thr	Tyr
	690					695					700				
Ser	Val	Ile	Val	Thr	Asp	Ala	Asp	Glu	Asp	Ile	Ser	Ala	Ser	His	Thr
705					710					715					720
Leu	Thr	Glu	Glu	Glu	Leu	Glu	Lys	Leu	Lys	Lys	Leu	Ser	His	Glu	Ιlε
				725					730					735	
Arg	Asn	Pro	Val	Ile	Lys	Leu	Ile	Ser	Gly	Trp	Asn	Ile	Asp	Ile	Leu
			740					745					750		

Glu	Arg	Gly	Glu	Val	Arg	Leu	Trp	Leu	Glu	Val	Glu	Lys	Leu	Ser	Pro
		755					760					765			
Ala	Ala	Glu	Leu	His	Leu	Ile	Phe	Asn	Asn	Lys	Glu	Ile	Phe	Ser	Ser
	770					775					780				
Pro	Asn	Arg	Lys	Ile	Asn	Phe	Asp	Arg	Glu	Lys	Gly	Leu	Val	Glu	Val
785					790					795					800
Ile	Ile	Gln	Asn	Leu	Ser	Glu	Glu	Asp	Lys	Gly	Ser	Tyr	Thr	Ala	Gln
				805					810					815	
Leu	Arg	Asp	Gly	Lys	Ala	Lys	Asn	Gln	Ile	Thr	Leu	Thr	Leu	Val	Asp
			820					825					830		
Asp	Asp	Phe	Asp	Lys	Leu	Leu	Arg	Lys	Ala	Asp	Ala	Lys	Arg	Arg	Asp
		835					840					845			
Trp	Lys	Arg	Lys	Gln	Gly	Pro	Tyr	Phe	Glu	Arg	Pro	Leu	Gln	Trp	Lys
	850					855					860				
Val	Thr	Glu	Asp	Cys	Gln	Val	Gln	Leu	Thr	Cys	Lys	Val	Thr	Asn	Thr
865					870					875					880
Lys	Lys	Glu	Thr	Arg	Phe	Gln	Trp	Phe	Phe	Gln	Arg	Ala	Glu	Met	Pro
				885					890					895	
Asp	Gly	Gln	Tyr	Asp	Pro	Glu	Thr	Gly	Thr	Gly	Leu	Leu	Cys	Ile	Glu
			900					905					910		
Glu	Leu	Ser	Lys	Lys	Asp	Lys	Gly	Ile	Tyr	Arg	Ala	Met	Val	Ser	Asp
		915					920					925			
Asp	Arg	Gly	Glu	Asp	Asp	Thr	Ile	Leu	Asp	Leu	Thr	Gly	Asp	Ala	Leu
	930					935					940				
Asp	Ala	Ile	Phe	Thr	Glu	Leu	Gly	Arg	Ile	Gly	Ala	Leu	Ser	Ala	Thr
945					950					955					960
Pro	Leu	Lys	Ile	Gln	Gly	Thr	Glu	Glu	Gly	Ile	Arg	Ile	Phe	Ser	Lys
				965					970					975	
Val	Lys	Tyr	Tyr	Asn	Val	Glu	Tyr	Met	Lys	Thr	Thr	Trp	Phe	His	Lys

Asp Lys Arg Leu Glu Ser Gly Asp Arg Ile Arg Thr Gly Thr Thr Leu Asp Glu Ile Trp Leu His Ile Leu Asp Pro Lys Asp Ser Asp Lys Gly Lys Tyr Thr Leu Glu Ile Ala Ala Gly Lys Glu Val Arg Gln Leu Ser Thr Asp Leu Ser Gly Gln Ala Phe Glu Asp Ala Met Ala Glu His Gln Arg Leu Lys Thr Leu Ala Ile Ile Glu Lys Asn Arg Ala Lys Val Val Arg Gly Leu Pro Asp Val Ala Thr Ile Met Glu Asp Lys Thr Leu Cys Leu Thr Cys Ile Val Ser Gly Asp Pro Thr Pro Glu Ile Ser Trp Leu Lys Asn Asp Gln Pro Val Thr Phe Leu Asp Arg Tyr Arg Met Glu Val Arg Gly Thr Glu Val Thr Ile Thr Ile Glu Lys Val Asn Ser Glu Asp Ser Gly Arg Tyr Gly Val Phe Val Lys Asn Lys Tyr Gly Ser Glu Thr Gly Gln Val Thr Ile Ser Val Phe Lys His Gly Asp Glu Pro Lys Glu Leu Lys Ser Met

<210> 3460

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3460

Met Leu Leu Ser Asp Ile Leu Leu Ser Met Leu Tyr Ser Asn Phe Leu

1 5 10 15

Pro Leu Ser Phe His Pro Arg Leu Pro Ala Pro Arg Gly Gln Gly Ser

20 25 30

Leu Ser Ile Leu Cys Ser Ala Val Ser Pro Val Pro Ser Val Thr Pro

35 40 45

Ser Thr Trp Met Ala Thr Thr Glu Lys Pro Glu Leu Gly Pro Ala His

50 55 60

Asp Ala Gly Asp Asn Asn Ile Tyr Glu Val Met Pro Ser Pro Val Leu

65 70 75 80

Leu Val Ser Pro Ile Ser Asp Thr Arg Ser Ile Asn Pro Ala Arg Pro

85 90 95

Leu Pro Thr Pro Pro His Leu Gln Ala Glu Pro Glu Asn His His Tyr

100 105 110

Gln Val Trp Ser Trp Glu Leu Gly Gly Val Val Gly Ile Pro Arg Ile

115 120 125

Gln Glu Pro Arg Ser Arg Gly Gly Glu Gly Ser Arg Gln Leu Lys Leu

130 135 140

Gly Ala Phe Leu Pro Ser Ser Pro Gln Ala Ser Arg Ser Leu Leu Ser

145 150 155 160

Lys Lys Pro Lys Pro Pro Pro

165

<210> 3461

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3461

Met Met Arg Trp Asn Phe Ser Pro Glu Asp Leu Ser Ser Ile Phe Arg

1 5 10 15

Asn Asn Ser Thr Leu Pro Lys Ile Thr Val Lys Asn Val Asp Ile Glu 20 25 30

Phe Thr Ile Pro Thr Ala Val Thr Ile Glu Val Glu Pro Ser Pro Val
35 40 45

Gln Gln Asp Asn Pro Pro Ile Ser Ser Glu Gln Ala Asp Phe Ser Leu
50 55 60

Ala Gln Pro Asp Ser Pro Ser Leu Pro Leu Glu Ser Pro Glu Glu Ser
65 70 75 80

Glu Ser Ser Ala Gln Glu Ala Thr Ala Gln Thr Pro Asn Pro Pro
85 90 95

Lys Glu Val Glu Pro Ser Pro Val Gln Gln Glu Phe Pro Ala Glu Pro 100 105 110

Thr Glu Pro Ala Lys Glu Val Glu Pro Ser Ala Thr Gln Gln Glu Ala 115 120 125

Ser Gly His Pro Leu Lys Ser Thr Lys Glu Val Asn Pro Pro Lys
130 135 140

Gln Glu Ile Pro Ala Gln Pro Ser Glu Pro Pro Glu Lys Val Glu Leu 145 150 155 160

Ser Pro Val Leu Gln Gln Ala Pro Thr Gln Leu Leu Glu Pro Leu Lys 165 170 175

Lys Val Glu Cys Ser Pro Val Gln Gln Ala Val Pro Ala Gln Ser Ser 180 185 190 Glu Pro Ser Ile Val Val Glu Pro Ser Pro Val Gln Gln Ile Ala His

195
200
205

Leu Cys Leu Gln Ser Ser Leu Arg Lys Trp Asn Pro Leu
210
215
220

<210> 3462

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3462

Met Ser Gly Ala Cys Thr Ser Tyr Val Ser Ala Glu Gln Glu Val Val

1 5 10 15

Arg Gly Phe Ser Cys Pro Arg Pro Gly Gly Glu Ala Ala Ala Val Phe
20 25 30

Cys Cys Gly Phe Arg Asp His Lys Tyr Cys Cys Asp Asp Pro His Ser 35 40 45

Phe Phe Pro Tyr Glu His Ser Tyr Met Trp Trp Leu Ser Ile Gly Ala
50 55 60

Leu Ile Gly Leu Ser Val Ala Ala Val Val Leu Leu Ala Phe Ile Val
65 70 75 80

Thr Ala Cys Val Leu Cys Tyr Leu Phe Ile Ser Ser Lys Pro His Thr
85 90 95

Lys Leu Asp Leu Gly Leu Ser Leu Gln Thr Ala Gly Pro Val Gln Val
100 105 110

Ala Thr Asn Lys Arg Asn Gln Thr Val Leu Thr Leu Lys Gly Leu Thr
115 120 125

Trp Arg Thr Arg Gln Ala His Lys Trp Pro Gly Gly Pro Val Val Ala

130 135 140

Leu His Gly Ala Leu Gly Arg Lys Lys

145 150

<210> 3463

<211> 928

<212> PRT

<213> Homo sapiens

<400> 3463

Met Ala Val Arg Phe Gln Val Ala Asp Met Glu Glu Leu Thr Ile Trp

1 5 10 15

Glu Gln His Thr Ala Thr Leu Ser Lys Asp Pro Arg Arg Gly Phe Gly

20 25 30

Ile Ala Ile Ser Gly Gly Arg Asp Arg Pro Gly Gly Ser Met Val Val

35 40 45

Ser Asp Val Val Pro Gly Gly Pro Ala Glu Gly Arg Leu Gln Thr Gly

50 55 60

Asp His Ile Val Met Val Asn Gly Val Ser Met Glu Asn Ala Thr Ser

65 70 75 80

Ala Phe Ala Ile Gln Ile Leu Lys Thr Cys Thr Lys Met Ala Asn Ile

85 90 95

Thr Val Lys Arg Pro Arg Arg Ile His Leu Pro Ala Thr Lys Ala Ser

100 105 110

Pro Ser Ser Pro Gly Arg Gln Asp Ser Asp Glu Asp Asp Gly Pro Gln

115 120 125

Arg Val Glu Glu Val Asp Gln Gly Arg Gly Tyr Asp Gly Asp Ser Ser

130 135 140

Ser	Gly	Ser	Gly	Arg	Ser	Trp	Asp	Glu	Arg	Ser	Arg	Arg	Pro	Arg	Pro
145					150					155					160
Gly	Arg	Arg	Gly	Arg	Ala	Gly	Ser	His	Gly	Arg	Arg	Ser	Pro	Gly	Gly
				165					170					175	
Gly	Ser	Glu	Ala	Asn	Gly	Leu	Ala	Leu	Val	Ser	Gly	Phe	Lys	Arg	Leu
			180					185					190		
Pro	Arg	Gln	Asp	Val	Gln	Met	Lys	Pro	Val	Lys	Ser	Val	Leu	Vál	Lys
		195					200					205			
Arg	Arg	Asp	Ser	Glu	Glu	Phe	Gly	Val	Lys	Leu	Gly	Ser	Gln	Ile	Phe
	210					215					220				
Ile	Lys	His	Ile	Thr	Asp	Ser	Gly	Leu	Ala	Ala	Arg	His	Arg	Gly	Leu
225					230		٠			235					240
Gln	Glu	Gly	Asp	Leu	Ile	Leu	Gln	Ile	Asn	Gly	Val	Ser	Ser	Gln	Asn
				245					250					255	
Leu	Ser	Leu	Asn	Asp	Thr	Arg	Arg	Leu	Ile	Glu	Lys	Ser	Glu	Gly	Lys
			260					265					270		
Leu	Ser	Leu	Leu	Val	Leu	Arg	Asp	Arg	Gly	Gln	Phe	Leu	Val	Asn	Ιlε
		275					280					285			
Pro	Pro	Ala	Val	Ser	Asp	Ser	Asp	Ser	Ser	Pro	Leu	Glu	Asp	Ile	Ser
	290					295					300				
Asp	Leu	Ala	Ser	Glu	Leu	Ser	Gln	Ala	Pro	Pro	Ser	His	Ile	Pro	Pro
305					310					315					320
Pro	Pro	Arg	His	Ala	Gln	Arg	Ser	Pro	Glu	Ala	Ser	Gln	Thr	Asp	Ser
				325					330					335	
Pro	Val	Glu	Ser	Pro	Arg	Leu	Arg	Arg	Glu	Ser	Ser	Val	Asp	Ser	Arg
			340					345					350		
Thr	Ile	Ser	Glu	Pro	Asp	Glu	Gln	Arg	Ser	Glu	Leu	Pro	Arg	Glu	Ser
		355					360					365			
Ser	Tvr	Asp	Ile	Tvr	Arg	Val	Pro	Ser	Ser	Gln	Ser	Met	Glu	Asp	Arg

	370					375					380				
Gly	Tyr	Ser	Pro	Asp	Thr	Arg	Val	Val	Arg	Phe	Leu	Lys	Gly	Lys	Ser
385					390					395					400
Ile	Gly	Leu	Arg	Leu	Ala	Gly	Gly	Asn	Asp	Val	Gly	Ile	Phe	Val	Ser
				405					410					415	
Gly	Val	Gln	Ala	Gly	Ser	Pro	Ala	Asp	Gly	Gln	Gly	Ile	Gln	Glu	Gly
			420					425					430		
Asp	Gln	Ile	Leu	Gln	Val	Asn	Asp	Val	Pro	Phe	Gln	Asn	Leu	Thr	Arg
		435					440					445			
Glu	Glu	Ala	Val	Gln	Phe	Leu	Leu	Gly	Pro	Pro	Pro	Gly	Glu	Glu	Met
	450					455					460				
Glu	Leu	Val	Thr	Gln	Arg	Lys	Gln	Asp	Ile	Phe	Trp	Lys	Met	Val	Gln
465					470					475					480
Ser	Arg	Val	Gly	Asp	Ser	Phe	Tyr	Ile	Arg	Thr	His	Phe	Glu	Leu	Glu
				485					490					495	
Pro	Ser	Pro	Pro	Ser	Gly	Leu	Gly	Phe	Thr	Arg	Gly	Asp	Val	Phe	His
			500					505					510		
Val	Leu	Asp	Thr	Leu	His	Pro	Gly	Pro	Gly	Gln	Ser	His	Ala	Arg	Gly
		515					520					525			
Gly	His	Trp	Leu	Ala	Val	Arg	Met	Gly	Arg	Asp	Leu	Arg	Glu	Gln	Glu
	530					535					540				
Arg	Gly	Ile	Ile	Pro	Asn	Gln	Ser	Arg	Ala	Glu	Gln	Leu	Ala	Ser	Leu
545					550					555					560
Glu	Ala	Ala	Gln	Arg	Ala	Val	Gly	Val	Gly	Pro	Gly	Ser	Ser	Ala	Gly
				565					570					575	
Ser	Asn	Ala	Arg	Ala	Glu	Phe	Trp	Arg	Leu	Arg	Gly	Leu	Arg	Arg	Gly
			580					585					590		
Ala	Lys	Lys	Thr	Thr	Gln	Arg	Ser	Arg	Glu	Asp	Leu	Ser	Ala	Leu	Thr
		595					600					605			

Arg	Gln	Gly	Arg	Tyr	Pro	Pro	Tyr	Glu	Arg	Val	Val	Leu	Arg	Glu	Ala
	610					615					620				
Ser	Phe	Lys	Arg	Pro	Val	Val	Ile	Leu	Gly	Pro	Val	Ala	Asp	Ile	Ala
625				•	630					635					640
Met	Gln	Lys	Leu	Thr	Ala	Glu	Met	Pro	Asp	Gln	Phe	Glu	Ile	Ala	Glu
				645					650					655	
Thr	Val	Ser	Arg	Thr	Asp	Ser	Pro	Ser	Lys	Ile	Ile	Lys	Leu	Asp	Thr
			660					665					670		
Val	Arg	Val	Ile	Ala	Glu	Lys	Asp	Lys	His	Ala	Leu	Leu	Asp	Val	Thr
		675					680					685			
Pro	Ser	Ala	Ile	Glu	Arg	Leu	Asn	Tyr	Val	Gln	Tyr	Tyr	Pro	Ile	Val
	690					695					700				
Val	Phe	Phe	Ile	Pro	Glu	Ser	Arg	Pro	Ala	Leu	Lys	Ala	Leu	Arg	Gln
705					710					715					720
Trp	Leu	Ala	Pro	Ala	Ser	Arg	Arg	Ser	Thr	Arg	Arg	Leu	Tyr	Ala	Gln
				725					730					735	
Ala	Gln	Lys	Leu	Arg	Lys	His	Ser	Ser	His	Leu	Phe	Thr	Ala	Thr	Ile
			740					745					750		
Pro	Leu	Asn	Gly	Thr	Ser	Asp	Thr	Trp	Tyr	Gln	Glu	Leu	Lys	Ala	Ile
		755					760					765			
Ile	Arg	Glu	Gln	Gln	Thr	Arg	Pro	Ile	Trp	Thr	Ala	Glu	Asp	Gln	Leu
	770					775					780				
Asp	Gly	Ser	Leu	Glu	Asp	Asn	Leu	Asp	Leu	Pro	His	His	Gly	Leu	Ala
785					790					795					800
Asp	Ser	Ser	Ala	Asp	Leu	Ser	Cys	Asp	Ser	Arg	Val	Asn	Ser	Asp	Tyr
				805					810					815	
Glu	Thr	Asp	Gly	Glu	Gly	Gly	Ala	Tyr	Thr	Asp	Gly	Glu	Gly	Tyr	Thr
			820					825					830		
Asp	Glv	Glu	Glv	Glv	Pro	Tvr	Thr	Asp	Val	Asp	Asp	Glu	Pro	Pro	Ala

Pro Ala Leu Ala Arg Ser Ser Glu Pro Val Gln Ala Asp Glu Ser Gln Ser Pro Arg Asp Arg Gly Arg Ile Ser Ala His Gln Gly Ala Gln Val Asp Ser Arg His Pro Gln Gly Gln Trp Arg Gln Asp Ser Met Arg Thr Tyr Glu Arg Glu Ala Leu Lys Lys Phe Met Arg Val His Asp Ala Glu Ser Ser Asp Glu Asp Gly Tyr Asp Trp Gly Pro Ala Thr Asp Leu

<210> 3464

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3464

Met Gln Lys Thr Arg Gln Asn Leu Asp Lys Val Asn Arg Ile Arg Thr Arg Ile Val Thr Pro Glu Arg Arg Glu Arg Leu Arg Gln Ser Gly Glu Arg Leu Arg Gln Ser Gly Glu Arg Leu Arg Gln Ser Gly Glu Arg Phe Lys Lys Ser Ile Ser Asn Ala Ala Pro Ser Lys Glu Ala Phe Lys Met Arg Ser Leu Arg Lys Gly Lys Asp Arg Thr Val Ala Glu Gly Glu

Glu Cys Ala Arg Glu Met Gly Val Asp Ile Ile Ala Arg Ser Glu Ser 85 90 95

Leu Gly Pro Ile Ser Glu Leu Tyr Ser Asp Glu Leu Ser Val Leu His

100 105 110

Leu Phe Ser Leu Phe

115

<210> 3465

<211> 202

<212> PRT

<213> Homo sapiens

<400> 3465

Met Leu Pro His Leu Phe Leu Glu Pro Ser Tyr Thr Val His Thr Gly

1 5 10 15

Pro Ala Gly Ser Ala Arg Asp Pro Arg Trp Asp Cys Leu Arg Lys Gly
20 25 30

Glu Gly Ala Ser Trp Ala Trp Ser Thr Gly Gly Thr Gly Gln Ala Arg

45

Pro Gly Ser Lys Leu Ala Pro Gln Ala Gln Lys Lys Gly Glu Gly Pro 50 55 60

Ala Lys Leu Thr Gly Arg Gly Met Thr Ala Arg Trp Glu Arg Thr His
65 70 75 80

Arg Ala Cys Ser Gln Glu Gln Gly Arg Glu Thr Arg Thr Gly Glu Ala 85 90 95

Thr Cys Ala Ser Gln Val Arg Met Glu Gly Glu Leu Ile Trp Gly Ala 100 105 110

Gly Cys Arg Val Leu Gly Pro Gly Thr Ser Thr Val Ile Ser Asn Gln

Lys Cys Pro Thr Ala Pro Arg Glu Met Asp Ser Val Met Arg Ser Ala Val Arg Asp Ser Lys Ala Ser Ala Pro Leu Gln Thr Gly His Trp Ala Cys Leu Cys Ser Arg Ala His Arg Ala Gly Val Lys Ser Val Gly Lys Gln Gly His Gln Arg Pro Cys Lys Arg Asp Asp Val His Thr Met Pro Thr His His Pro Thr Gln Gln Ser Arg Arg

<210> 3466

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3466

Met Ala Pro Ala Ser Asn Phe Ser Ala Gly Ser Asp Trp His Gly Val Gly Ala Ala Gly Ala Ala Pro Gly Gln His Leu Ala Ser Cys Pro Val Ala Pro Asp Gly Ser Ser Ala Ser Gly Pro His Phe Leu Leu Ser Thr Gly Lys Pro Thr Pro Ser Glu Ala Thr Arg Gly Lys Ser Glu Gln Gly Val Pro Ala Val Pro Thr Ser Gln Arg His Val Leu Trp Pro Leu Thr

Gln Pro Met Arg Gln Ser Ser Asp Pro Arg Ala His Phe Pro Gly His 85 90 95 Gly Ala Gln Pro Gln Pro Glu Pro Cys Glu Gly Arg Gly Thr Arg Met 105 100 110 Thr Thr Trp Gly Thr Met Ala Leu His Thr Trp Ala Leu Tyr Phe Ser 120 115 125 Leu Glu Asn Pro Gly Lys Ile Leu Lys Gln Val His Glu Val Leu Ser 130 135 140 Leu Cys Ser Lys Gln His Ser Ser Gly Val Gly Thr Lys Gly Ser Thr 145 150 155 160 Glu Pro Arg Pro Pro Gln Pro Leu Pro Gly Pro Ile Cys Ala Val Gln 165 175 170 Val Ile His Ala Cys Ser 180 <210> 3467 <211> 734 <212> PRT <213> Homo sapiens

His Lys Thr His Tyr Ala Val Gln Asp Thr Lys Gly Phe His Thr Glu Glu Asp Ile Gly Gly Leu His Ala Thr Ile Glu Cys Glu Leu Pro Gln Pro Asp Leu Tyr Lys Phe Val Gly Arg Ile Asn Val Tyr Ser Asp Leu Asn Asp Pro Val Val Arg Pro Leu Gly Ser Glu Asn Leu Leu Leu Arg Gly Ala Thr Leu Lys Asn Thr Glu Lys Ile Phe Gly Val Ala Ile Tyr Thr Gly Met Glu Thr Lys Met Ala Leu Asn Tyr Gln Ser Lys Ser Gln Lys Arg Ser Ala Val Glu Lys Ser Met Asn Ala Phe Leu Ile Val Tyr Leu Cys Ile Leu Ile Ser Lys Ala Leu Ile Asn Thr Val Leu Lys Tyr Val Trp Gln Ser Glu Pro Phe Arg Asp Glu Pro Trp Tyr Asn Gln Lys Thr Glu Ser Glu Arg Gln Arg Asn Leu Phe Leu Lys Ala Phe Thr Asp Phe Leu Ala Phe Met Val Leu Phe Asn Tyr Ile Ile Pro Val Ser Met Tyr Val Thr Val Glu Met Gln Lys Phe Leu Gly Ser Tyr Phe Ile Thr Trp Asp Glu Asp Met Phe Asp Glu Glu Thr Gly Glu Gly Pro Leu Val Asn Thr Ser Asp Leu Asn Glu Glu Leu Gly Gln Val Glu Tyr Ile Phe

Thr	Asp	Lys	Thr	Gly	Thr	Leu	Thr	Glu	Asn	Asn	Met	Glu	Phe	Lys	Glu
	290					295					300				
Cys	Cys	Ile	Glu	Gly	His	Val	Tyr	Val	Pro	His	Val	Ile	Cys	Asn	Gly
305					310					315					320
Gln	Val	Leu	Pro	Glu	Ser	Ser	Gly	Ile	Asp	Met	Ile	Asp	Ser	Ser	Pro
				325					330					335	
Ser	Val	Asn	Gly	Arg	Glu	Arg	Glu	Glu	Leu	Phe	Phe	Arg	Ala	Leu	Cys
			340					345					350		
Leu	Cys	His	Thr	Val	Gln	Val	Lys	Asp	Asp	Asp	Ser	Val	Asp	Gly	Pro
		355					360					365			
Arg	Lys	Ser	Pro	Asp	Gly	Gly	Lys	Ser	Cys	Val	Tyr	Ile	Ser	Ser	Ser
	370					375					380				
Pro	Asp	Glu	Val	Ala	Leu	Val	Glu	Gly	Val	Gln	Arg	Leu	Gly	Phe	Thr
385					390					395					400
Tyr	Leu	Arg	Leu	Lys	Asp	Asn	Tyr	Met	Glu	Ile	Leu	Asn	Arg	Glu	Asn
				405					410					415	
His	Ile	Glu	Arg	Phe	Glu	Leu	Leu	Glu	Ile	Leu	Ser	Phe	Asp	Ser	Val
			420					425					430		
Arg	Arg	Arg	Met	Ser	Val	Ile	Val	Lys	Ser	Ala	Thr	Gly	Glu	Ile	Tyr
		435					440					445			
Leu	Phe	Cys	Lys	Gly	Ala	Asp	Ser	Ser	Ile	Phe	Pro	Arg	Val	Ile	Glu
	450					455					460				
Gly	Lys	Val	Asp	Gln	Ile	Arg	Ala	Arg	Val	Glu	Arg	Asn	Ala	Val	Glu
465					470					475					480
Gly	Leu	Arg	Thr	Leu	Cys	Val	Ala	Tyr	Lys	Arg	Leu	Ile	Gln	Glu	Glu
				485					490					495	
Tyr	Glu	Gly	Ile	Cys	Lys	Leu	Leu	Gln	Ala	Ala	Lys	Val	Ala	Leu	Gln
			500					505					510		
Asn	Arg	Glu	Lvs	Lvs	Leu	Ala	Glu	Ala	Tvr	Glu	Gln	Ile	Glu	Lvs	Asp

		515					520					525			
Leu	Thr	Leu	Leu	Gly	Ala	Thr	Ala	Val	Glu	Asp	Arg	Leu	Gln	Glu	Lys
	530					535					540				
Ala	Ala	Asp	Thr	Ile	Glu	Ala	Leu	Gln	Lys	Ala	Gly	Ile	Lys	Val	Trp
545					550					555					560
Val	Leu	Thr	Gly	Asp	Lys	Met	Glu	Thr	Ala	Ala	Ala	Thr	Cys	Tyr	Ala
				565					570					575	
Cys	Lys	Leu	Phe	Arg	Arg	Asn	Thr	Gln	Leu	Leu	Glu	Leu	Thr	Thr	Lys
			580					585					590		
Arg	Ile	Glu	Glu	Gln	Ser	Leu	His	Asp	Val	Leu	Phe	Glu	Leu	Ser	Lys
		595					600					605			
Thr	Val	Leu	Arg	His	Ser	Gly	Ser	Leu	Thr	Arg	Asp	Asn	Leu	Ser	Gly
	610					615					620				
Leu	Ser	Ala	Asp	Met	Gln	Asp	Tyr	Gly	Leu	Ile	Ile	Asp	Gly	Ala	Ala
625					630					635					640
Leu	Ser	Leu	Ile	Met	Lys	Pro	Arg	Glu	Asp	Gly	Ser	Ser	Gly	Asn	Tyr
				645					650					655	
Arg	Glu	Leu	Phe	Leu	Glu	Ile	Cys	Arg	Ser	Cys	Ser	Ala	Val	Leu	Cys
			660					665					670		
Cys	Arg	Met	Ala	Pro	Leu	Gln	Lys	Ala	Gln	Ile	Val	Lys	Leu	Ile	Lys
		675					680					685			
Phe	Ser	Lys	Glu	His	Pro	Ile	Thr	Leu	Ala	Ile	Gly	Asp	Gly	Ala	Asn
	690					695					700				
Asp	Val	Ser	Met	Ile	Leu	Glu	Ala	His	Val	Gly	Ile	Gly	Glu	Leu	Arg
705					710		•			715					720
Pro	Cys	Cys	Trp	His	Ile	Leu	Val	Ala	Arg	Ser	Pro	Leu	Arg		
				725					730						

<210> 3468

<211> 316

<212> PRT

<213> Homo sapiens

<400> 3468

Met Glu Gln Ala Tyr Gln Leu Leu Ala Trp Arg Ser Gly Arg Val Val

1 5 10 15

Gly Ser Leu Glu Lys Thr Arg Lys Leu Val Leu Arg Pro Ala Leu Ala 20 25 30

Val Gly Val Thr Ala Val Leu Ser Val Ala Gly Ile Leu Asn Ala Ala 35 40 45

Gln Pro Pro Ala Val Lys Thr Val Glu Val Pro Ile His Gln Leu Pro
50 55 60

Ala Ser Met Asn Asn Leu Lys Ile Val Leu Leu Ser Asp Ile His Leu
65 70 75 80

Gly Pro Thr Val Gly Arg Thr Lys Met Glu Met Phe Val Arg Met Val
85 90 95

Asn Val Leu Glu Pro Asp Ile Thr Val Ile Val Gly Asp Leu Ser Asp
100 105 110

Ser Glu Ala Ser Val Leu Arg Thr Ala Val Ala Pro Leu Gly Gln Leu
115 120 -125

His Ser His Leu Gly Ala Tyr Phe Val Thr Gly Asn His Glu Tyr Tyr 130 135 140

Thr Ser Asp Val Ser Asn Trp Phe Ala Leu Leu Glu Ser Leu His Val 145 150 155 160

Gln Pro Leu His Asn Glu Asn Val Lys Ile Ser Ala Thr Arg Ala Gln 165 170 175

Arg Gly Gly Gly Ser Gly Ser Gly Ser Glu Asp Glu Asp Trp Ile

Cys Leu Ala Gly Val Asp Asp Ile Glu Ala Asp Ile Leu His Tyr Ser Gly Arg Gly Met Asp Leu Asp Lys Ala Leu Glu Gly Cys Ser Pro Asp His Thr Ile Ile Leu Leu Ala His Gln Pro Leu Ala Ala Lys Arg Ala Leu Gln Ala Arg Pro Asp Ile Asn Leu Ile Leu Ser Gly His Thr His Ala Gly Gln Ile Phe Pro Leu Asn Val Ala Ala Tyr Leu Leu Asn Pro Phe Phe Ala Gly Leu Tyr Gln Val Ala Gln Ala Thr Phe Val Tyr Val Ser Pro Gly Thr Ala Tyr Tyr Gly Ile Pro Met Arg Leu Gly Ser Arg Ala Glu Ile Thr Glu Leu Ile Leu Gln Arg Ser Pro

<210> 3469

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3469

Met Ser Glu Glu Val Asn Tyr Ala Thr Leu Thr Phe Gln Asp Ser Ala

1 5 10 15

Gly Ala Arg Asn Asn Arg Asp Gly Asn Asn Leu Arg Lys Arg Gly His

20 25 30

Pro	Ala	Pro	Ser	Pro	Ile	Trp	Arg	His	Ala	Ala	Leu	Gly	Leu	Val	Thr
		35					40					45			
Leu	Cys	Leu	Met	Leu	Leu	Ile	Gly	Leu	Val	Thr	Leu	Gly	Met	Met	Phe
	50					55					60				
Leu	Gln	Ile	Ser	Asn	Asp	Ile	Asn	Ser	Asp	Ser	Glu	Lys	Leu	Ser	Gln
65					70					75					80
Leu	Gln	Lys	Thr	Ile	Gln	Gln	Gln	Gln	Asp	Asn	Leu	Ser	Gln	Gln	Leu
				85					90					95	
Gly	Asn	Ser	Asn	Asn	Leu	Ser	Met	Glu	Glu	Glu	Phe	Leu	Lys	Ser	Gln
			100					105					110		
Ile	Ser	Ser	Leu	Leu	Lys	Arg	Gln	Glu	Gln	Met	Ala	Ile	Lys	Leu	Cys
		115					120					125			
Gln	Glu	Leu	Ile	Ile	His	Thr	Ser	Asp	His	Arg	Cys	Asn	Pro	Cys	Pro
	130					135					140				
Lys	Met	Trp	Gln	Trp	Tyr	Gln	Asn	Ser	Cys	Tyr	Tyr	Phe	Thr	Thr	Asr
145					150					155					160
Glu	Glu	Lys	Thr	Trp	Ala	Asn	Ser	Arg	Lys	Asp	Cys	Ile	Asp	Lys	Asr
				165					170					175	
Ser	Thr	Leu	Val	Lys	Ile	Asp	Ser	Leu	Glu	Glu	Lys	Asp	Phe	Leu	Met
			180					185					190		
Ser	Gln	Pro	Leu	Leu	Met	Phe	Ser	Phe	Phe	Trp	Leu	Gly	Leu	Ser	Trp
		195					200					205			
Asp	Ser	Ser	Gly	Arg	Ser	Trp	Phe	Trp	Glu	Asp	Gly	Ser	Val	Pro	Ser
	210					215					220				
Pro	Ser	Leu	Tyr	Val	Ser	Asn	Tyr								
225					230										

<211> 459

<212> PRT

<213> Homo sapiens

<400> 3470

Met Gln Ile Lys Gln Glu Gly Glu Leu Gln Leu Gln Glu Gln Gln Ala 1 5 10 15

Leu Gly Val Glu Ala Trp Ala Ala Gly Gln Pro Asp Ile Gly Glu Glu
20 25 30

Pro Trp Gly Leu Ser Gln Leu Asp Ser Gly Ala Gly Asp Ile Ser Thr

35 40 45

Asp Ala Thr Ser Gly Val His Ser Asn Phe Ser Thr Thr Ile Pro Pro 50 55 60

Thr Ser Trp Gln Thr Asp Leu Pro Pro His His Pro Ser Ser Ala Cys
65 70 75 80

Ser Asp Gly Thr Leu Lys Leu Asn Thr Ala Ala Ser Thr Glu Asp Val
85 90 95

Lys Ile Val Ile Lys Thr Glu Val Glu Glu Glu Val Val Ala Thr
100 105 110

Pro Val His Pro Thr Asp Leu Glu Ala His Gly Thr Leu Phe Gly Pro
115 120 125

Gly Gln Ala Thr Arg Phe Pro Ser Pro Ala Gln Glu Gly Ala Trp
130 135 140

Glu Ser Gln Gly Ser Ser Phe Pro Ser Gln Asp Pro Val Leu Gly Leu 145 150 155 160

Arg Glu Pro Ala Arg Pro Glu Arg Asp Met Gly Glu Leu Ser Pro Ala 165 170 175

Val Ala Gln Glu Glu Thr Pro Pro Gly Asp Trp Leu Phe Gly Gly Val 180 185 190

Arg	Trp	Gly	Trp	Asn	Phe	Arg	Cys	Lys	Pro	Pro	Val	Gly	Leu	Asn	Pro
		195					200					205			
Arg	Thr	Gly	Pro	Glu	Gly	Leu	Pro	Tyr	Ser	Ser	Pro	Asp	Asn	Gly	Glu
	210					215					220				
Ala	Ile	Leu	Asp	Pro	Ser	Gln	Ala	Pro	Arg	Pro	Phe	Asn	Glu	Pro	Cys
225					230					235					240
Lys	Tyr	Pro	Gly	Arg	Thr	Lys	Gly	Phe	Gly	His	Lys	Pro	Gly	Leu	Lys
				245					250					255	
Lys	His	Pro	Ala	Ala	Pro	Pro	Gly	Gly	Arg	Pro	Phe	Thr	Cys	Ala	Thr
			260					265					270		
Cys	Gly	Lys	Ser	Phe	Gln	Leu	Gln	Val	Ser	Leu	Ser	Ala	His	Gln	Arg
		275					280					285			
Ser	Cys	Gly	Ala	Pro	Asp	Gly	Ser	Gly	Pro	Gly	Thr	Gly	Gly	Gly	Gly
	290					295					300				
Ser	Gly	Ser	Gly	Gly	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Arg
305					310					315					320
Asp	Gly	Ser	Ala	Leu	Arg	Cys	Gly	Glu	Cys	Gly	Arg	Cys	Phe	Thr	Arg
				325					330					335	
Pro	Ala	His	Leu	Ile	Arg	His	Arg	Met	Leu	His	Thr	Gly	Glu	Arg	Pro
			340					345					350		
Phe	Pro	Cys	Thr	Glu	Cys	Glu	Lys	Arg	Phe	Thr	Glu	Arg	Ser	Lys	Leu
		355					360					365			
Ile	Asp	His	Tyr	Arg	Thr	His	Thr	Gly	Val	Arg	Pro	Phe	Thr	Cys	Thr
	370					375					380				
Val	Cys	Gly	Lys	Ser	Phe	Ile	Arg	Lys	Asp	His	Leu	Arg	Lys	His	Gln
385					390					395					400
Arg	Asn	His	Ala	Ala	Gly	Ala	Lys	Thr	Pro	Ala	Arg	Gly	Gln	Pro	Leu
				405					410					415	
Pro	Thr	Pro	Pro	Ala	Pro	Pro	Asp	Pro	Phe	Lys	Ser	Pro	Ala	Ser	Lys

420 425 430

Gly Pro Leu Ala Ser Thr Asp Leu Val Thr Asp Trp Thr Cys Gly Leu

435 440 445

Ser Val Leu Gly Pro Thr Asp Gly Gly Asp Met

450 455

<210> 3471

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3471

Met Ser Gly Ala Ile Phe Gly Pro Leu Glu Gly Pro Ser Ser Leu Asp

1 5 10 15

Ala Pro Ser Ile His Pro Leu Val Cys Pro Leu Cys His Val Gln Tyr

20 25 30

Glu Arg Pro Cys Leu Leu Asp Cys Phe His Asp Phe Cys Ala Gly Cys

35 40 45

Leu Arg Gly Arg Ala Thr Asp Gly Arg Leu Thr Cys Pro Leu Cys Gln

50 55 60

His Gln Thr Val Leu Lys Gly Pro Ser Gly Leu Pro Pro Val Asp Arg

65 70 75 80

Leu Leu Gln Phe Leu Val Asp Ser Ser Gly Asp Gly Val Glu Ala Val

85 90 95

Arg Cys Ala Asn Cys Asp Leu Glu Cys Ser Glu Gln Ala Gly Ala Ala

100 105 110

Gly Arg Val Gly Glu Glu Gln Arg Val Pro Gly Cys Thr Val Pro Asn

115 120 125

Ala Cys Thr Cys Thr Gln His Val Phe Arg Gly Arg Pro Gly Ser Gly 130 135 140 Phe Ser Ser Thr Ser Leu Gly His Leu Gly Pro Lys Cys Glu Pro His 145 150 155 160 Tyr Thr Gly Gly Glu Thr Glu Val Gln Asn Lys Gly Leu Glu Pro Val 165 170 175 Ser Arg Gln Trp Gln Arg Leu Arg Pro Phe Asp Leu Gly Arg Ala His 180 185 190 Trp Ser Pro Ile Gln Gly Gly Val Val Asp Leu His Arg Arg Gly Ser 200 205 195 Pro Val Cys Arg Pro Gly Pro Thr Leu Lys Gly Leu Cys Tyr Pro Ser 210 215 220 Gly Ile Glu Ala Ala Thr Ala Gln Gly Arg Trp Gly Gln His Ala Val 225 230 235 240 Pro Ser Gly Leu

<210> 3472

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3472

Met Leu Glu Arg Asn Leu Thr Ser Met Met Ser Val Glu Glu Pro Leu

1 5 10 15

Pro Arg Pro Leu Thr Ser Leu Tyr Ile Arg Leu Ser Ile Leu Glu Arg
20 25 30

Asn His Met Asn Met Thr Tyr Met Ala Lys Ser Ser Val Lys Ile His

Ile Ser Lys Val Ile Ile Gly Phe Val Leu Lys Arg Ser Leu Thr Asn Val Cys Gly Lys Val Leu Ser Gln Asn Ser His Leu Val Asn His Gln Arg Ile His Thr Gly Glu Lys Ser Tyr Arg Cys His Glu Cys Gly Lys Ala Phe Thr Gln Gly Ser Arg Phe Ile Asn His Gln Ile Val His Thr Gly Glu Asn Phe Pro Asn Val Leu Asn Val Ala Arg Leu Leu Arg Met Ala Leu Asn Ser Gly Leu Thr Lys <210> 3473 <211> 194 <212> PRT <213> Homo sapiens

<400> 3473 Met Thr Gly Gly Gln Ser Glu Gly Leu Ala Trp Ser Leu Pro Gln Thr Lys His Trp Cys Gly Lys Gly Val Val Gly Glu Met Arg Arg His Leu Gly Ala Pro Arg Ala Val Leu Tyr Gly Arg Gln Ile Leu Gln Pro Ala Val Glu Ala Pro Ser Ser Cys Pro Val Ser Asp Thr Thr Trp Pro Ser

Gly His Gly Arg Val Thr Gln Leu Leu Gly Pro Tyr Phe Ser Leu Leu 65 70 75 80 Glu Lys Gly Val Tyr Glu Glu Trp Ser Leu Gly Ser Val Pro Leu Ser 90 85 95 Asp Cys Val Gly Gln Arg Val Gln Gly Arg Gln Ala Gln Lys Gln Lys 100 105 110 Ser Lys Met Glu Glu Phe Glu Cys Arg Trp Leu Pro His Gln Cys Pro 120 125 115 Leu Gly Leu Gly Trp Phe Pro Ile Trp Glu Gly Pro Gln Gln Asp Ser 130 135 140 Ser Ala Arg Thr Lys Glu Ala Val Pro Lys Asp Ala Pro Gln Gln Gln 145 150 155 160 Ala Ala Ser Gly Trp Pro Gln Ala Pro Arg Pro Glu Glu Lys Lys Gly 165 170 175 Thr Cys Lys Lys Asp His His Lys Arg Gly Gln His Ser Thr Ser His 180 185 190 Cys His

<210> 3474

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3474

Met Val Arg Ser Pro Pro His Ala Pro Ser Pro Ser Phe Leu Ser Ser

1 5 10 15

Gly Arg Leu Val Pro Asp Ala Gly Ser Ser Pro Leu Pro Cys Leu Cys

20 25 30 Arg Phe Leu Leu Pro Pro Pro Leu Val Ala Asp Thr Val Pro Gly Leu 40 35 45 His Glu Arg Gly Gly Ser Ala Ser Asp Arg Gly Gly Glu Leu Ala Pro 55 50 60 Ser Ser Gly Glu Glu Ser Ser Glu His Pro Glu Ala Pro Phe Ser Asp 70 75 80 65 Leu Gln Arg Arg Gly Thr Leu Met Gly Trp Ala Leu Arg Thr Ala Arg 95 85 90 Gln Leu Ala Ser Arg Asn Leu Gln Glu Arg Ser Ala Cys Trp Ser Arg 100 105 110 Thr Leu Gln Lys Val Ala 115 <210> 3475 <211> 134 <212> PRT <213> Homo sapiens <400> 3475 Met Gly Gly Gln Arg Pro Met His Arg Trp Pro Gln Ala His Ala Gly 1 5 10 15 His Cys Pro Thr Thr Leu Ala Pro Arg Gln Cys Ser Ala Ser Ala Ala 20 25 30

25 40 45

Phe Tyr Asp Leu Ser Leu Cys Phe Pro Ser Ser Gln Glu Trp Gln Glu
50 55 60

Ala Gln Cys Pro Leu His Val Ala Ser Ala Val Pro Leu Leu Lys Ala

Arg Thr Pro Thr Ser Val Gln Pro Val Gly Gly Arg Gln Ser Trp Arg 70 75 80 65 Pro Leu Gly Leu Val Leu Arg Thr Ala Ala Ala Thr Ala Pro His Ala 90 85 95 Gln Ser Ile Gln Ala Gly Leu Pro Cys Glu Pro Leu Gly Pro Arg Arg 100 105 110 Pro Leu Ala Thr Leu His Phe His Ser Arg Gln Gly Pro Arg Trp Gln 125 115 120 Gly Gly Pro Ser Trp Ala 130

<210> 3476

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3476

Met Val Trp Asn Arg Gly Tyr Asn Leu Lys Ala Tyr Gly Lys Phe Ile

1 5 10 15

Leu Ile Ala Phe His Leu Phe Leu Leu Glu Val Glu Asn Glu Ala His
20 25 30

Ser Gln Arg Ala Lys Pro Arg Gln Arg Pro Gln Asp Leu Phe Trp Arg
35 40 45

Trp Lys Leu Val Glu Asn Pro Asp Cys Leu His Gly Leu Pro Ser Arg
50 55 60

Pro Gln Arg Asn Thr Asp Ile Asn Phe Thr Leu Arg Ser Leu Leu Glu 65 70 75 80

Thr Leu Ile His Lys Asp Asn His Cys Gln Pro Leu Phe Arg Leu Leu

85 90 95

Gln Glu Pro Ser Ser Lys Ile Lys His Lys Lys Val Phe
100 105

<210> 3477

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3477

Met Gly Ala Gln Leu His Leu His Ser Gln Gly Val Pro Trp Pro Gly

1 5 10 15

Leu Leu Ala Ala Gly Val Arg Phe Ser Ser Trp Pro Leu Gln Gln Ala

20 25 30

Ser Pro Gly Phe Ser Trp Trp Leu Gly Ala Arg Arg Ala Ala Pro Met

35 40 45

Gln Ser Ala Gly Phe Thr Phe Val Gly Gly Pro Ser Val Glu Ala Ser

50 55 60

His Val Ala Arg Pro Arg Thr Arg Trp Glu Arg Thr Ala Gln Val Gln

65 70 75 80

Arg Glu Leu Trp Glu Val Trp Leu Thr Thr Leu Arg Glu Cys Gly Ala

85 90 95

Arg Lys Asp Leu Met Cys His His Ser Ile Ser Val Met Gly Arg Arg

100 105 110

Arg Gln Val Lys Gly Ala Leu Gly Thr Tyr Arg Ala Pro Ala Tyr Trp

115 120 125

Pro Gly Thr Val Ile Val Leu Gly Ala Met Cys His Gly Ser Pro Leu

130 135 140

Arg Gly Arg Gly Glu Ala Gly Gly Asp Arg Ala Ser Val Gly Leu Ser

145

150

155

160

Ser Cys Ser Pro Arg Ala Gln Arg Gln Pro Asn Ser Cys Val Gln Ser 165 170 175

Glu Ser Thr

<210> 3478

<211> 372

<212> PRT

<213> Homo sapiens

<400> 3478

Met Arg Ala Ile Leu Lys Met Gly Gln Leu Cys Gly Asp His Pro Leu

1 5 10 15

Gly Ala Val Thr Phe Arg Cys Val Ala Leu Val Ala Val Trp Leu Cys
20
25
30

Gly Thr Ala Thr Arg Ser His Val Gly Lys Asp Ser Cys Gly Leu Gly
35 40 45

Thr Glu Leu Ser Leu Leu Gly Val Ser Arg Cys Trp Gly Glu Gly Arg
50 55 60

Gln Ser Ser Gln Ser Pro Ser Thr Ala His Pro Ala Ala Arg Pro Trp 65 70 75 80

Pro Val Asn Pro Pro Ser Pro Phe Leu Pro Gln Glu Ala Val Glu Lys 85 90 95

Val Thr Gln His Ile His Gly Leu Ser Gly Lys Lys Asp Gly Leu Val
100 105 110

Pro Met Phe Ile Asn Thr His Ser Gly Leu Phe Thr His Leu Gly Val

115			120		125	
Phe Thr Leu	Gly Ala	Arg Ala	Asp Ser	Tyr Tyr	Glu Tyr	Leu Leu Lys
130		135			140	
Gln Trp Ile	Gln Gly	Gly Lys	Gln Glu	Thr Gln	Leu Leu	Glu Asp Tyr
145		150		155		160
Val Glu Ala	Ile Glu	Gly Val	Arg Thr	His Leu	Leu Arg	His Ser Glu
	165			170		175
Pro Ser Lys	Leu Thr	Phe Val	Gly Glu	Leu Ala	His Gly	Arg Phe Ser
	180		185			190
Ala Lys Met	Asp His	Leu Val	Cys Phe	Leu Pro	Gly Thr	Leu Ala Leu
195			200		205	
Gly Val Tyr	His Gly	Leu Pro	Ala Ser	His Met	Glu Leu	Ala Gln Glu
210		215			220	
Leu Met Glu	Thr Cys	Tyr Gln	Met Asn	Arg Gln	Met Glu	Thr Gly Leu
225		230		235		240
Ser Pro Glu	Ile Val	His Phe	Asn Leu	Tyr Pro	Gln Pro	Gly Arg Arg
	245			250		255
Asp Val Glu	Val Lys	Pro Ala	Asp Arg	His Asn	Leu Leu	Arg Pro Glu
	260		265			270
Thr Val Glu	Ser Leu	Phe Tyr	Leu Tyr	Arg Val	Thr Gly	Asp Arg Lys
275			280		285	
Tyr Gln Asp	Trp Gly	Trp Glu	Ile Leu	Gln Ser	Phe Ser	Arg Phe Thr
290		295			300	
Arg Val Pro	Ser Gly	Gly Tyr	Ser Ser	Ile Asn	Asn Val	Gln Asp Pro
305		310		315		320
Gln Lys Pro	Glu Pro	Arg Asp	Lys Met	Glu Ser	Phe Phe	Leu Gly Glu
	325			330		335
Thr Leu Lys	Tyr Leu	Phe Leu	Leu Phe	Ser Asp	Asp Pro	Asn Leu Leu
	340		345			350

Ser Leu Asp Ala Tyr Val Phe Asn Thr Glu Ala His Pro Leu Pro Ile 355 360 365

Trp Thr Pro Ala 370

<210> 3479

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3479

Met His Thr Gln Val Cys Ala His Thr Tyr Ile Arg Met His Arg His

1 5 10 15

Leu Cys Thr His Met Gln IIe His Pro Gln His Pro IIe Cys Ala Thr
20 25 30

His Arg Arg Tyr Met Glu Thr Asp Ala His Thr Gly Leu Cys Thr
35 40 45

His Ile Arg Met His Arg His Leu Cys Thr His Met Gln Ile His Pro
50 55 60

Gln His Pro Ile Cys Ala Thr His Arg His Arg Tyr Met Lys Thr Asp
65 70 75 80

Ala His Thr Gly Leu Cys Thr His Val Cys Met His Arg His Leu Cys
85 90 95

Thr His Met Gln Met His Pro Gln Tyr Pro Ile Cys Ala Thr His Arg 100 105 110

His Thr Tyr Met Glu Thr Glu Ala His Thr Gly Leu Cys Thr His Val 115 120 125

His Met His Arg His Leu Cys Thr His Met Gln Met His Pro Gln Tyr

130 135 140 Pro Ile Cys Ala Ile His Arg His Thr Tyr Met Glu Thr Asp Ala His 150 160 145 155 Thr Gly Leu Cys Thr His Val His Met His Arg His Leu Cys Thr His 170 165 175 Met Gln Met His Pro Gln Tyr Pro Ile Cys Ala Thr His Arg His Thr 190 180 185 Tyr Met Glu Thr Asp Val His Thr Gly Leu Cys Thr His Val His Met 195 200 205 His Arg His Leu Cys Thr His Met Gln Met His Pro Gln Tyr Pro Ile 215 220 210 Cys Ala Thr His Arg His Thr Tyr Met Glu Thr Asp Ala His Thr Gly 225 230 235 240 Leu Cys Thr His Val His Met His Arg His Leu Cys Thr His Met Gln 245 250 255

Met His Pro Gln Tyr Arg Ile Cys Ala Thr Gln Thr Tyr Val His Gly
260 265 270

Asp Arg Cys Thr Tyr Arg Ser Met His Thr Cys Thr His Ala Gln Ala 275 280 285

Pro Val His Thr Leu Tyr Leu Leu Ile Cys Ser Ser Pro Pro Cys Arg 290 295 300

Leu Leu Gly Arg

305

<210> 3480

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3480

35

Met Pro Ala Pro Gly Ser His Val Leu Thr Pro Ala Pro Leu Ala Cys

1 5 10 15

Thr Pro Gly Asp Arg Leu Asn Glu Arg Val Ala Tyr His Arg Leu Ala

20 25 30

45

Ala Leu Gln His Arg Leu Gly His Gly Glu Leu Ala Glu His Phe Tyr

40

Leu Lys Ala Leu Ser Leu Cys Asn Ser Pro Leu Glu Phe Asp Glu Glu 50 55 60

Thr Leu Tyr Tyr Val Lys Val Tyr Leu Val Leu Gly Asp Ile Ile Phe 65 70 75 80

Tyr Asp Leu Lys Asp Pro Phe Asp Ala Ala Gly Tyr Tyr Gln Leu Ala 85 90 95

Leu Ala Ala Val Asp Leu Gly Asn Lys Lys Ala Gln Leu Lys Ile
100 105 110

Tyr Thr Arg Leu Ala Thr Ile Tyr His Asn Phe Leu Leu Asp Arg Glu
115 120 125

Lys Ser Leu Phe Phe Tyr Gln Lys Ala Arg Thr Phe Ala Thr Glu Leu 130 135 140

Asn Val Arg Arg Val Asn Leu Pro Pro Leu Pro Leu Cys Gly Trp Ala 145 150 155 160

Pro Trp Leu Ala Pro Ser His Pro Arg

165

<210> 3481

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3481

Met Ala Val Phe Thr Gln His Gly Ala Ser Tyr Thr Ser Thr Leu Ala

1 5 10 15

Leu Pro Phe Leu Thr Ser Phe His Gly Asp Pro Phe Met Ser Val Trp

20 25 30

Thr Ala Thr Leu Phe Pro Gln Leu His Gly Ala Pro Arg Arg Ser Gln

35 40 45

Leu Glu Leu Pro Asn Pro Met Thr Asp Pro Phe Ile Ala Ala Ile Cys

50 55 60

Thr Arg Val Gly Val Ser Ile Gly His Cys Gln Ala Arg Met Ala Gly

65 70 75 80

Pro Lys His Val His Phe Ser Phe Glu Ala Pro Val Leu Arg Gln Cys

85 90 95

Gly Leu Arg Pro Trp Glu Ser Cys Gly Cys Gln

100 105

<210> 3482

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3482

Met Arg Gly Ser Cys Thr Pro Gly Pro Cys Leu Ser Trp Ser His Thr

1 5 10 15

Gly Cys Gly His Thr Thr Ser Trp Ser Ser Leu Ser Gly Gln Pro His

20 25 30

Asn Pro Leu Phe Pro Ser Trp Ala Pro Leu Pro Ser Cys Pro Gly Ser 35 40 45 Cys Leu Ser Ile Arg Gln Ser Thr Arg Thr Ala Glu Leu Trp Cys Ala 50 55 60 Gln His Thr Arg Ile Pro Ala Arg Arg Ser Glu Val Arg Gly Ala Ala 70 75 80 65 Leu Gly Thr Gly Pro Ala Gly Glu Gly Pro Gly Arg Trp Arg Asp Ser 90 95 85 Leu Gln Lys Ser Ala Val Pro Ser Phe Pro Glu Gly Pro His Gly Phe 100 105 110 Pro Tyr Gly Thr Ser Glu Pro Ser Gly Lys Cys Gly Ser Val Lys Glu 120 125 115 Gly Thr Gly Ile Pro Phe Ser Ser Pro Thr Ile Glu Pro Tyr Ser Gly

135

140

His Leu Phe Arg

130

145

<210> 3483

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3483

Met Ala Glu Gly Lys Gly Glu Ala Gly Ile Thr Trp Gln Glu Arg Glu

1 5 10 15

Gln Asp Arg Gly Gly Gly Ala Ser Gly Ser Ser Lys Gln Pro Asp Leu

20 25 30

Val Trp Thr His Arg Val Arg Thr His Ser Leu Leu Gln Gly Gln His

35 40 45 His Asp Ile His Glu Gly Cys Ala His Met Thr Gln Thr Pro Pro Thr 60 50 55 Arg Pro His Leu Gln His Trp Arg Ser His Phe Asn Met Arg Phe Gly 65 70 75 80 Gly Gly Lys Thr Cys Lys Pro Tyr Arg Glu Gly Gly Ala Gly Trp Trp 85 90 95 Ile Gln Leu His Arg Leu Gly Asn Gly Pro Glu Ala Ala Phe Arg Leu 100 105 110 Val

<210> 3484

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3484

Met Lys Gly Pro Leu Cys Cys Leu Ala Leu Arg Ala Trp Gly Cys Arg

1 5 10 15

Arg His Ser Ala Val Leu Glu Glu Pro Cys Pro Val Gln Val Pro Leu
20 25 30

Leu Pro Pro Leu Gly Ser Ser Ala Arg Trp Pro Ile His Leu Leu Ser

35 40 45

Arg Ser Leu Arg Ser Val Ser Leu Val Cys Pro Val Ser Trp Asn Ser 50 55 60

Trp Trp Leu Glu Ala His Val Pro Leu Glu Leu Phe Gln Pro Arg Arg
65 70 75 80

Val Glu Trp Ser Gln Arg Ile Gln Gly Arg Val Gln Gln Pro His Trp 85 90 95 Gly Arg Trp Val Ser Leu Gly Leu Gly Asn Asp Ser Ile Gly Ser Leu 105 100 110 Ser Met Trp Pro Gly Val Arg Ser Pro Gln Pro Pro Ala Asp Phe His 120 125 115 Gln Pro Arg Ala Ser Gly Phe Ala Ala Glu Ala Lys His Gln Arg Leu 130 135 140 Gly Ala Ser Pro Thr Cys Trp Cys Ser Ser Leu Leu Arg Ser Ser Gly 150 155 160 145 Thr Trp Ala Arg Val Arg Gln Asp Arg Gly Gly Lys Ala Arg Ala Arg 165 170 175 His Met Ala Val Gly Ser Leu Arg Ala Ser Gly Gln Ala Asn Phe Gln 180 185 190 Cys Leu Met Phe Cys Thr 195

<210> 3485

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3485

Met His Gln His Pro Trp Thr Arg Ala Arg Thr His Gln His Pro Trp

1 5 10 15

Ala Tyr Met Asp Ala His Ile Ser Thr Met Gly Thr His Thr Cys Thr

20 25 30

His Ser Arg Trp Leu Arg Leu Ala Gly Cys Leu Leu Arg Pro Arg Val

Ser Lys Ser Gly Gly Arg His Leu Gly Trp Gly His Ser Met Val Leu Arg Ser Pro Val Ser Pro Gly Pro Thr Cys Ser Gln Pro Trp Val Pro Lys Cys Cys Ser His Trp Ser Leu Cys Pro Thr His His Gly Gln Gly Cys Leu Asn Arg Ala Glu Ser Arg Val Met Gln Gly Trp Gly Val Glu Ala Leu Pro Arg Gly Ser Ser Gln Leu Trp Leu Gly Trp Ala Leu Pro Ser Leu Ser Cys Cys Glu Thr Gln Glu Pro Trp Gly Arg Thr Ala Val Cys Ile Arg Ala Val Val Lys Leu Gln Ile Pro Lys Cys Asp Leu Glu Thr Thr Leu Ala Gly Glu Ile Tyr Pro Gly Pro Leu Gly Leu Ser Leu Pro Ser Pro Ser Thr Val Arg Asp Arg Leu Arg Gly Val Pro Pro His Leu Cys Val Ala Ser Ala Gln Gln Ala Cys Pro Ala His Cys

<210> 3486

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3486

Met	Ala	Leu	Ser	His	Pro	Gln	Ala	Leu	Pro	Arg	Ser	Thr	Pro	His	Thr
1				5					10					15	
Leu	Leu	Leu	Leu	Pro	Gly	Tyr	Asn	Asn	Gly	Asn	Gly	Pro	Gly	Thr	Gln
			20					25					30		
Pro	Gly	Arg	Gly	Arg	Arg	Gly	Trp	Gly	Gly	Trp	Gly	Arg	Gly	Gln	Gly
		35					40					45			
Pro	Arg	Ala	Thr	Leu	Trp	Val	Pro	Thr	Asp	Gly	Leu	Leu	Gly	Val	His
	50					55					60				
Ser	Phe	Thr	Gln	Ser	Pro	Leu	Ser	Thr	Arg	Pro	Lys	Pro	Gly	Leu	Gly
65					70					75					80
Trp	Pro	Trp	Arg	Thr	Pro	Lys	Leu	Val	Lys	Gly	Gly	His	Gly	Leu	Asp
				85					90					95	
Ser	Arg	Ala	Lys	Asn	Gln	Ile	Gln	Leu							
			100					105							

<210> 3487

<211> 541

<212> PRT

<213> Homo sapiens

<400> 3487

Met Gln Arg Glu Val Pro Arg Gly Pro Cys Pro Glu Trp Glu Leu Lys

1 5 10 15

Ala Val Pro Ser Gln Gln Gln Gly Ile Cys Lys Glu Glu Pro Ala Gln

20 25 30

Glu Pro Ile Met Glu Arg Pro Leu Gly Gly Ala Gln Ala Trp Gly Arg

35 40 45

Gln Ala Gly Ala Leu Gln Arg Ser Gln Ala Ala Pro Trp Ala Pro Ala

	50					55					60				
Pro	Ala	Met	Ile	Trp	Asp	Val	Pro	Val	Glu	Glu	Phe	Pro	Leu	Arg	Cys
65					70					75					80
Pro	Leu	Phe	Ala	Gln	Gln	Arg	Val	Pro	Glu	Gly	Gly	Pro	Leu	Leu	Asp
				85					90					95	
Thr	Arg	Lys	Asn	Val	Gln	Ala	Thr	Glu	Gly	Arg	Thr	Lys	Ala	Pro	Ala
			100					105					110		
Arg	Leu	Cys	Ala	Gly	Glu	Asn	Ala	Ser	Thr	Pro	Ser	Glu	Pro	Glu	Lys
		115					120					125			
Phe	Pro	Gln	Val	Arg	Arg	Gln	Arg	Gly	Ala	Gly	Ala	Gly	Glu	Gly	Glu
	130					135					140				
Phe	Val	Cys	Gly	Glu	Cys	Gly	Lys	Ala	Phe	Arg	Gln	Ser	Ser	Ser	Leu
145					150					155					160
Thr	Leu	His	Arg	Arg	Trp	His	Ser	Arg	Glu	Lys	Ala	Tyr	Lys	Cys	Asp
				165					170					175	
Glu	Cys	Gly	Lys	Ala	Phe	Thr	Trp	Ser	Thr	Asn	Leu	Leu	Glu	His	Arg
			180					185					190		
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Phe	Cys	Gly	Glu	Cys	Gly	Lys
		195					200					205			
Ala	Phe	Ser	Cys	His	Ser	Ser	Leu	Asn	Val	His	Gln	Arg	Ile	His	Thr
	210					215					220				
Gly	Glu	Arg	Pro	Tyr	Lys	Cys	Ser	Ala	Cys	Glu	Lys	Ala	Phe	Ser	Cys
225					230					235					240
Ser	Ser	Leu	Leu	Ser	Met	His	Leu	Arg	Val	His	Thr	Gly	Glu	Lys	Pro
				245					250					255	
Tyr	Arg	Cys	Gly	Glu	Cys	Gly	Lys	Ala	Phe	Asn	Gln	Arg	Thr	His	Leu
			260					265					270		
Thr	Arg	His	His	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Gln	Cys	Gly
		275					280					285			

S	er	Cys	Gly	Lys	Ala	Phe	Thr	Cys	His	Ser	Ser	Leu	Thr	Val	His	Glu
		290					295					300				
L	ys	Ile	His	Ser	Gly	Asp	Lys	Pro	Phe	Lys	Cys	Ser	Asp	Cys	Glu	Lys
3	05					310					315					320
A	la	Phe	Asn	Ser	Arg	Ser	Arg	Leu	Thr	Leu	His	Gln	Arg	Thr	His	Thr
					325					330					335	
G	ly	Glu	Lys	Pro	Phe	Lys	Cys	Ala	Asp	Cys	Gly	Lys	Gly	Phe	Ser	Cys
				340					345					350		
Н	lis	Ala	Tyr	Leu	Leu	Val	His	Arg	Arg	Ile	His	Ser	Gly	Glu	Lys	Pro
			355					360					365			
P	he	Lys	Cys	Asn	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Ser	His	Ala	Tyr	Leu
		370				•	375					380				
Ι	le	Val	His	Arg	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Asp	Cys	Ser
3	85					390					395					400
G	ln	Cys	Trp	Lys	Ala	Phe	Ser	Cys	His	Ser	Ser	Leu	Ile	Val	His	Gln
					405					410					415	
A	rg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Ser	Glu	Cys	Gly	Arg
				420					425					430		
A	la	Phe	Ser	Gln	Asn	His	Cys	Leu	Ile	Lys	His	Gln	Lys	Ile	His	Ser
			435					440					445			
G	lly	Glu	Lys	Ser	Phe	Lys	Cys	Glu	Lys	Cys	Gly	Glu	Met	Phe	Asn	Trp
		450					455					460				
S	er	Ser	His	Leu	Thr	Glu	His	Gln	Arg	Leu	His	Ser	Glu	Gly	Lys	Pro
4	65					470					475					480
L	eu	Ala	Ile	Gln	Phe	Asn	Lys	His	Leu	Leu	Ser	Thr	Tyr	Tyr	Val	Pro
					485					490					495	
G	lly	Ser	Leu	Leu	Gly	Ala	Gly	Asp	Ala	Gly	Leu	Arg	Asp	Val	Asp	Pro
				500					505					510		
1	۵۱-	Aen	Δla	I All	Asn	Val	Ala	Lve	Len	Leu	Cvs	Val	Val	Pro	Pro	Arc

515 520 525

Ala Gly Arg Asn Phe Ser Leu Gly Ser Lys Pro Arg Asn
530 535 540

<210> 3488

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3488

Met Val Ser Glu Thr Asn Val Lys Cys Tyr Lys Gly Arg Asp Thr Gly

1 5 10 15

Ile Glu Gly Lys Arg Ile Ile Ile Tyr Val Leu Val Trp Val Ile Gln
20 25 30

Lys Thr Asp Ala Lys Ile Gly Leu Lys Val Gln Glu Ile Tyr Trp Gly
35 40 45

Lys His Leu Gln Gly Lys Met Gly Leu Gly Ala Gly Gly Cys Trp Gln
50 55 60

Ser Trp Gln Thr Pro Val Glu Glu Glu Arg Pro Gly Glu Arg Gly Ser
65 70 75 80

Phe Pro Leu Glu Cys Gly Ala Glu Lys Val Ser Ala Lys Pro Leu Gly
85 90 95

Ser Gln Cys Cys Pro Ser Asp Glu Ser Leu Pro Cys Ser Gly Ile Gly
100 105 110

Trp Lys Gln Gln Val Gly Arg Val Ala Ser Ala 115 120 <210> 3489 <211> 121

<212> PRT

<213> Homo sapiens

<400> 3489

Met Leu Glu Leu Gly Trp Glu Ala Leu Tyr Glu Gln Arg Ala Glu Pro

1 5 10 15

Arg Ser Gly Phe Glu Glu Leu Asn Asn Glu Asn Lys Ser Thr Leu Gln
20 25 30

Leu Glu Gln Gln Val Lys Glu Leu Glu Lys Ser Gly Gly Ala Glu Glu
35 40 45

Pro Arg Gly Ser Glu Ser Ala Ala Ala Ala Arg Pro Val Pro Gly Ala 50 55 60

Pro Val Pro Gln Gly Ala Trp Met Cys Gly Gln Ala Gly Trp Thr Pro 65 70 75 80

Gln Glu His Pro Gly Leu Ser Gly Glu Ala Val Gly Thr Gly Glu Ala 85 90 95

Ala Gly Gly Ala Gly Glu Ala Ala Cys His Ser Phe Arg Ala Ala Glu 100 105 110

Asn Arg Glu Leu Asn Ile Thr Ile Ile 115 120

<210> 3490

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3490 Met Glu Asp Ile Ile Leu Leu His Leu Glu Ile Pro Leu Ser Asn Arg 10 5 15 1 Glu Gly Leu Cys Ile Val Pro Phe Asn Gly Ile Asp Cys His His Leu 20 25 30 Gln Thr Glu Cys Leu Pro Ser Pro Ser Cys Cys Phe Gly Met Glu Ala 35 40 45 Arg Val Gln Gly Pro Val Asp Arg Ala Cys Ala His Pro Cys Ala Ala 50 55 60 Ala Arg Val Leu Leu Thr Phe Asp Phe Ala Ala Thr Gly Ile Ile Gly 80 70 75 65 Val Ile Ile Phe Val Ile Phe Pro Arg Val Phe Met Pro Val Arg Leu 90 95 85 Ser Ser Leu Thr Phe Glu Met Val Leu Gly Leu Asp Val Val Thr His

105

120

110

Thr Cys Asn Leu Ser Thr Leu Gly Val

100

<210> 3491

<211> 155

<212> PRT

<213> Homo sapiens

115

<400> 3491

Met Ile Pro Pro Pro Gln Ser Ser Gly Asn Ser Ser Cys Arg Ile Pro

1 5 10 15

Leu Trp Gly Phe Pro Ser Leu Gly Gln Ser Gln Gly Ala Leu Trp Val

20 25 30

Cys Pro Gln Thr Gly Leu Pro Gly Ser Gly Ser Arg Pro Pro Leu Pro 35 40 45 Gly Ser Pro Gly Asp Pro Pro Thr Arg Gln Gly Gln Gly Arg Ile Trp 50 55 60 Leu Val Pro Pro Ala Leu Asp Leu Ser Trp Ile Trp Pro Ala Pro Pro 70 75 80 65 Ala Arg Pro Pro Leu Ile Pro Val Thr Ser Met Leu Phe Pro Val Pro 85 90 95 Glu Thr Trp Gly Leu Gln Glu Arg Arg Thr His His Asp Arg Ala Asp 100 105 110 Pro Gln Tyr Leu Leu Leu Glu Val Gln Leu His Pro Arg Thr Asp 115 120 125 Ala Ala Gly Leu Arg Gln Ala Leu Leu Ser Ser His Arg Phe Ser Gly 130 135 140 Ala Gly Ser Gly Gly Pro Lys Ser Gln Pro Gly 150 155 145

<210> 3492

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3492

Met Val Ser Leu Ser Pro Phe Gln Met Arg Thr Leu Glu Pro Arg Asp

1 5 10 15

Ile Lys Val Ile Lys Gln Ala Val Ser Ser Gln Ser Ala Lys Pro Gly

20 25 30

Leu Ala Trp Ala Lys Val His Ser Phe Asn His Lys Thr Gln Trp Thr

His Val Lys Ala Ser Thr Thr Tyr Met Ser Met Gly Met Tyr Val Ser Thr His Thr Pro Arg Val Gly Ser Ile His Ser Ser Lys Val Lys Lys Asn Lys Arg Gln Lys Asn Leu Lys Ala Ile Tyr Ser Ile Leu Lys Ile Phe Ser Leu Ile Asn Leu <210> 3493 <211> 134 <212> PRT <213> Homo sapiens <400> 3493 Met Pro Val Ile Ile Ile Ser Tyr Phe Gly Gln Leu Asp Leu Leu Ile Glu Ala Trp Trp Ala Gln Gln Met Arg Pro Glu Trp Pro Ser Ser Lys His Lys Leu Ala Ser Arg Gln Gln His Ser Ser Lys Arg Ser Arg Thr Cys Trp Gln Ala Thr Ala Arg Glu Glu Lys Ser Trp Trp Arg Arg Ser Pro Pro Arg Leu Ser Ala Cys Cys Ala Ile Cys Leu Ala Ile Ser Pro

Arg Glu Val Ala Ser Ala Pro Pro Ile Lys Asn Trp Val Trp Ile Ser

Thr Leu Ala His Thr Lys Met Met Cys Ser Arg Thr Pro Gln Gly Gln
100 105 110

His Ser Trp Val Ser Met Val Leu Ala Val Pro Thr Leu Ser Ala Leu 115 120 125

Ala Ala Glu Lys Leu Gly 130

<210> 3494

<211> 909

<212> PRT

<213> Homo sapiens

<400> 3494

Met Leu Ser Val Ala Val Lys Ile Leu Ser Asp Lys Ser Glu Ser Asn

1 5 10 15

Thr Lys Glu Phe Leu IIe Ala Val Gly Leu Lys Gly Ala Thr Leu Gln
20 25 30

His Arg Met Leu Pro Ser Gly Leu Ser Trp His Glu Gln Ile Leu Tyr
35 40 45

Phe Leu Asn Ile Ala Asp Glu Pro Val Leu Gly Tyr Asn Pro Pro Thr
50 55 60

Ser Phe Thr Thr Phe His Val His Leu Trp Ser Cys Ala Leu Asp Tyr 65 70 75 80

Arg Pro Leu Tyr Leu Pro Ile Arg Ser Leu Leu Thr Val Glu Thr Phe
85 90 95

Ser Val Ser Ser Ser Val Ala Leu Asp Lys Ser Ser Ser Thr Leu Arg 100 105 110

Ile Ile Leu Asp Glu Ala Ala Leu His Leu Ser Asp Lys Cys Asn Thr

		115					120					125			
Val	Thr	Ile	Asn	Leu	Ser	Arg	Asp	Tyr	Val	Arg	Val	Met	Asp	Met	Gly
	130					135					140				
Leu	Leu	Glu	Leu	Thr	Ile	Thr	Ala	Val	Lys	Ser	Asp	Ser	Asp	Gly	Glu
145					150					155					160
Gln	Thr	Glu	Pro	Arg	Phe	Glu	Leu	His	Cys	Ser	Ser	Asp	Val	Val	His
				165					170					175	
Ile	Arg	Thr	Cys	Ser	Asp	Ser	Cys	Ala	Ala	Leu	Met	Asn	Leu	Ile	Gln
			180					185					190		
Tyr	Ile	Ala	Ser	Tyr	Gly	Asp	Leu	Gln	Thr	Pro	Asn	Lys	Ala	Asp	Met
		195					200					205			
Lys	Pro	Gly	Ala	Phe	Glu	Arg	Arg	Ser	Lys	Val	Asp	Ser	Ser	Gly	Arg
	210					215					220				
Ser	Ser	Ser	Arg	Gly	Pro	Val	Leu	Pro	Glu	Ala	Asp	Gln	Gln	Met	Leu
225					230					235					240
Arg	Asp	Leu	Met	Ser	Asp	Ala	Met	Glu	Glu	Ile	Asp	Met	Gln	Gln	Gly
				245					250					255	
Thr	Ser	Ser	Val	Lys	Pro	Gln	Ala	Asn	Gly	Val	Leu	Asp	Glu	Lys	Ser
			260					265					270		
Gln	Ile	Gln	Glu	Pro	Cys	Cys	Ser	Asp	Leu	Phe	Leu	Phe	Pro	Asp	Glu
		275					280					285			
Ser	Gly	Asn	Val	Ser	Gln	Glu	Ser	Gly	Pro	Thr	Tyr	Ala	Ser	Phe	Ser
	290					295					300				
His	His	Phe	Ile	Ser	Asp	Ala	Met	Thr	Gly	Val	Pro	Thr	Glu	Asn	Asp
305					310					315					320
Asp	Phe	Cys	Ile	Leu	Phe	Ala	Pro	Lys	Ala	Ala	Met	Gln	Glu	Lys	Glu
				325					330					335	
Glu	Glu	Pro	Val	Ile	Lys	Ile	Met	Val	Asp	Asp	Ala	Ile		Ile	Arg
			3/10					3/15					350		

Asp	Asn	Tyr	Phe	Ser	Leu	Pro	Val	Asn	Lys	Thr	Asp	Thr	Ser	Lys	Ala
		355					360					365			
Pro	Leu	His	Phe	Pro	Ile	Pro	Val	Ile	Arg	Tyr	Val	Val	Lys	Glu	Val
	370					375					380				
Ser	Leu	Val	Trp	His	Leu	Tyr	Gly	Gly	Lys	Asp	Phe	Gly	Thr	Val	Pro
385					390					395					400
Pro	Thr	Ser	Pro	Ala	Lys	Ser	Tyr	Ile	Ser	Pro	His	Ser	Ser	Pro	Ser
				405					410					415	
His	Thr	Pro	Thr	Arg	His	Gly	Arg	Asn	Thr	Val	Cys	Gly	Gly	Lys	Gly
			420					425					430		
Arg	Asn	His	Asp	Phe	Leu	Met	Glu	Ile	Gln	Leu	Ser	Lys	Val	Lys	Phe
		435					440					445			
Gln	His	Glu	Val	Tyr	Pro	Pro	Cys	Lys	Pro	Asp	Cys	Asp	Ser	Ser	Leu
	450					455					460				
Ser	Glu	His	Pro	Val	Ser	Arg	Gln	Val	Phe	Ile	Val	Gln	Asp	Leu	Glu
465					470					475					480
Ile	Arg	Asp	Arg	Leu	Ala	Thr	Ser	Gln	Met	Asn	Lys	Phe	Leu	Tyr	Leu
				485					490					495	
Tyr	Cys	Ser	Lys	Glu	Met	Pro	Arg	Lys	Ala	His	Ser	Asn	Met	Leu	Thr
			500					505					510		
Val	Lys	Ala	Leu	His	Val	Cys	Pro	Glu	Ser	Gly	Arg	Ser	Pro	Gln	Glu
		515					520					525			
Cys	Cys	Leu	Arg	Val	Ser	Leu	Met	Pro	Leu	Arg		Asn	Ile	Asp	Gln
•	530					535					540				
Asp	Ala	Leu	Phe	Phe	Leu	Lys	Asp	Phe	Phe	Thr	Ser	Leu	Ser	Ala	Glu
545					550					555					560
Val	Glu	Leu	Gln		Thr	Pro	Asp	Pro		Val	Lys	Lys	Ser		Gly
				565					570					575	
Ala	Asp	Val	Thr	Cys	Ser	Leu	Pro	Arg	His	Leu	Ser	Thr	Ser	Lys	Glu

			580					585					590		
Pro	Asn	Leu	Val	Ile	Ser	Phe	Ser	Gly	Pro	Lys	Gln	Pro	Ser	Gln	Asn
		595					600			•		605			
Asp	Ser	Ala	Asn	Ser	Val	Glu	Val	Val	Asn	Gly	Met	Glu	Glu	Lys	Asn
	610					615					620				
Phe	Ser	Ala	Glu	Glu	Ala	Ser	Phe	Arg	Asp	Gln	Pro	Val	Phe	Phe	Arg
625					630					635					640
Glu	Phe	Arg	Phe	Thr	Ser	Glu	Val	Pro	Ile	Arg	Leu	Asp	Tyr	His	Gly
				645					650					655	
Lys	His	Val	Ser	Met	Asp	Gln	Gly	Thr	Leu	Ala	Gly	Ile	Leu	Ile	Gly
			660					665					670		
Leu	Ala	Gln	Leu	Asn	Cys	Ser	Glu	Leu	Lys	Leu	Lys	Arg	Leu	Ser	Tyr
		675					680					685			
Arg	His	Gly	Leu	Leu	Gly	Val	Asp	Lys	Leu	Phe	Ser	Tyr	Ala	Ile	Thr
	690					695					700				
Glu	Trp	Leu	Asn	Asp	Ile	Lys	Lys	Asn	Gln	Leu	Pro	Gly	Ile	Leu	Gly
705					710					715					720
Gly	Val	Gly	Pro	Met	His	Ser	Leu	Val	Gln	Leu	Val	Gln	Gly	Leu	Lys
				725					730					735	
Asp	Leu	Val	Trp	Leu	Pro	Ile	Glu	Gln	Tyr	Arg	Lys	Asp	Gly	Arg	Ile
			740					745					750		
Val	Arg	Gly	Phe	Gln	Arg	Gly	Ala	Ala	Ser	Ser	Gly	Thr	Ser	Thr	Ala
		755					760					765			
Met	Ala	Ala	Leu	Glu	Leu	Thr	Asn	Arg	Met	Val		Thr	Ile	Gln	Ala
	770					775					780				
Ala	Ala	Glu	Thr	Ala	Tyr	Asp	Met	Val	Ser		Gly	Thr	Leu	Ser	
785					790			_		795	_	_		•••	800
Glu	Pro	Lys	Lys		Lys	Arg	Phe	Pro		His	Arg	Leu	Ala		Gln
				805					810					815	

Pro Val Asp Leu Arg Glu Gly Val Ala Lys Ala Tyr Ser Val Val Lys

820

825

830

Glu Gly Ile Thr Asp Thr Ala Gln Thr Ile Tyr Glu Thr Ala Ala Arg

835

840

845

Glu His Glu Ser Arg Gly Val Thr Gly Ala Val Gly Glu Val Leu Arg 850 855 860

Gln Ile Pro Pro Ala Val Val Lys Pro Leu Ile Val Ala Thr Glu Ala 865 870 875 880

Thr Ser Asn Val Leu Gly Gly Met Arg Asn Gln Ile Arg Pro Asp Val 885 890 895

Arg Gln Asp Glu Ser Gln Lys Trp Arg His Gly Asp Asp
900 905

<210> 3495

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3495

Met Gln Pro Arg Tyr Arg Thr Val Leu Leu Ala Ser Pro Tyr Gln Ile

1 5 10 15

Tyr Ser Cys Tyr Phe Val Val Lys Thr Ser Pro Leu His Pro Asn Pro
20 25 30

Gly Ser His Trp Phe Phe Ser Ser Phe Ser Phe Phe Phe Phe Leu
35 40 45

Arg Gln Ser Leu Ala Leu Leu Ser Arg Leu Glu Trp Cys Ser Gly Val 50 55 60

Ile Ser Val His Cys Asn Leu Arg Leu Gln Gly Ser Ser Gly Ser Pro

Ala Ser Ala Ser Arg Val Ala Gly Ile Met Gly Ala Arg His His Ala Gln Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His Cys Phe Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser <210> 3496 <211> 115 <212> PRT <213> Homo sapiens <400> 3496 Met Ile Pro Pro Gln Glu Ala Ser Ala Arg Arg Glu Ile Glu Asp Lys Leu Lys Gln Glu Glu Glu Thr Leu Ser Phe Ile Arg Asp Ser Leu Glu Lys Ser Asp Gln Leu Thr Lys Asn Met Val Ser Ile Leu Ser Ser Phe Glu Ser Arg Leu Met Lys Leu Glu Asn Ser Ile Ile Pro Gly Leu Phe Gln Thr Gln Ser Arg Gly Thr Gly Phe Ala Arg Pro Arg Arg Pro Leu Ser Arg Arg Pro Thr Gly Pro Phe Tyr Arg Ser Leu Ala Ala Cys

Pro Ser Pro Arg Thr Arg Arg Ser Thr Ser Ser Thr Gly Trp Ser Arg

Trp Ala Thr

115

<210> 3497

<211> 337

<212> PRT

<213> Homo sapiens

<400> 3497

Met Cys Arg Asp Tyr Val Leu Asp Cys Asn Ile Leu Pro Pro Leu Leu

1 5 10 15

Gln Leu Phe Ser Lys Gln Asn Arg Leu Thr Met Thr Arg Asn Ala Val

20 25 30

Trp Ala Leu Ser Asn Leu Cys Arg Gly Lys Ser Pro Pro Glu Phe

35 40 45

Ala Lys Val Ser Pro Cys Leu Asn Val Leu Ser Trp Leu Leu Phe Val

50 55 60

Ser Asp Thr Asp Val Leu Ala Asp Ala Cys Trp Ala Leu Ser Tyr Leu

65 70 75 80

Ser Asp Gly Pro Asn Asp Lys Ile Gln Ala Val Ile Asp Ala Gly Val

85 90 95

Cys Arg Arg Leu Val Glu Leu Leu Met His Asn Asp Tyr Lys Val Val

100 105 110

Ser Pro Ala Leu Arg Ala Val Gly Asn Ile Val Thr Gly Asp Asp Ile

115 120 125

Gln Thr Gln Val Ile Leu Asn Cys Ser Ala Leu Gln Ser Leu Leu His

130 135 140

Leu Leu Ser Ser Pro Lys Glu Ser Ile Lys Lys Glu Ala Cys Trp Thr

145					150					155					160
Ile	Ser	Asn	Ile	Thr	Ala	Gly	Asn	Arg	Ala	Gln	Ile	Gln	Thr	Val	Ile
				165					170					175	
Asp	Ala	Asn	Ile	Phe	Pro	Ala	Leu	Ile	Ser	Ile	Leu	Gln	Thr	Ala	Glu
			180					185					190		
Phe	Arg	Thr	Arg	Lys	Glu	Ala	Ala	Trp	Ala	Ile	Thr	Asn	Ala	Thr	Ser
		195					200					205			
Gly	Gly	Ser	Ala	Glu	Gln	Ile	Lys	Tyr	Leu	Val	Glu	Leu	Gly	Cys	Ile
	210					215					220				
Lys	Pro	Leu	Cys	Asp	Leu	Leu	Thr	Val	Met	Asp	Ser	Lys	Ile	Val	Gln
225					230					235					240
Val	Ala	Leu	Asn	Gly	Leu	Glu	Asn	Ile	Leu	Arg	Leu	Gly	Glu	Gln	Glu
				245					250					255	
Ala	Lys	Arg	Asn	Gly	Thr	Gly	Ile	Asn	Pro	Tyr	Cys	Ala	Leu	Ile	Glu
			260					265					270		
Glu	Ala	Tyr	Gly	Leu	Asp	Lys	Ile	Glu	Phe	Leu	Gln	Ser	His	Glu	Asn
		275					280					285			
Gln	Glu	Ile	Tyr	Gln	Lys	Ala	Phe	Asp	Leu	Ile	Glu	His	Tyr	Phe	Gly
	290					295					300				
Thr	Glu	Asp	Glu	Asp	Ser	Ser	Ile	Ala	Pro	Gln	Val	Asp	Leu	Asn	Gln
305		•			310					315					320
Gln	Gln	Tyr	Ile	Phe	Gln	Gln	Cys	Glu	Ala	Pro	Met	Glu	Gly	Phe	Gln
				325					330					335	

Leu

<210> 3498

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3498

Met Leu Glu Arg Gly His Cys Cys Leu Pro Gly Gly Ala Lys Ser Gly

1 5 10 15

Leu Ala Gly Ser Ser Ala Pro Val His Arg Gln Gly Arg Leu Arg Thr

20 25 30

Val Trp Ala Pro Gln His Gln Arg Val Ala Pro Trp His Pro Pro Gly

35 40 45

Pro His Cys Ile Trp Gly Lys Lys Leu His Gly Asn Val Ser Leu Tyr

50 55 60

Leu Ala Leu Leu Ala His Pro Gly Gly His Tyr Asp Thr Ser Leu Pro

65 70 75 80

His Cys Thr Leu Pro Ala Leu Ala Thr Asn Met Pro Pro Thr Thr Thr

85 90 95

Asp His Leu Gly Gln Pro Ala Thr Ser Thr Ser Pro Thr Ser Gln Cys

100 105 110

Leu Ser Val Lys Ile Pro Arg Thr Lys

115 120

<210> 3499

<211> 512

<212> PRT

<213> Homo sapiens

<400> 3499

Met Pro His Ala Gly Gly Lys Phe Tyr Gly Cys Lys Lys Cys Gly Lys

1				5					10					15	
Ala	Phe	Ile	Ser	Phe	Cys	Ala	Phe	Arg	Tyr	His	Gln	Arg	Thr	His	Thr
			20					25					30		
Lys	Glu	Lys	Pro	Tyr	Ala	Cys	Lys	Gln	Cys	Gly	Lys	Ala	Tyr	Ile	Ser
		35					40					45			
Tyr	Thr	Ser	Phe	Gln	Tyr	His	Gln	Leu	Asn	His	Thr	Gly	Ala	Lys	Arg
	50					55					60				
Tyr	Glu	Cys	Lys	Gln	Cys	Gly	Lys	Gly	Phe	Asp	Leu	Pro	Asn	Ser	Ile
65					70					75					80
Arg	Tyr	His	Glu	Met	Thr	His	Thr	Gly	Glu	Lys	Pro	His	Glu	Cys	Lys
				85					90					95	
Gln	Cys	Gly	Lys	Thr	Phe	Arg	Cys	Ala	Ser	Ser	Leu	Arg	Ile	His	Gly
			100					105					110		
Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Gln	Cys	Gly	Lys
		115					120					125			
Val	Ser	Arg	Tyr	Trp	Ser	Gly	Leu	Gln	Val	His	Glu	Val	Thr	His	Ιle
	130					135					140				
Gly	Lys	Lys	Leu	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ser	Tyr	Tyr	Ser
145					150					155					160
Ser	Gly	Ser	Phe	Leu	Asn	His	Lys	Arg	Ile	His	Thr	Arg	Glu	Lys	Ser
				165					170					175	
Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Gly	Asn	Pro	Ile	Ser	Phe
			180					185					190		
Gln	Lys	His	Glu	Gly	Ser	His	Arg	Lys	Trp	Lys	Pro	Tyr	Glu	Cys	Lys
		195					200					205			
Glu	Cys	Gly	Lys	Val	Phe	Ser	Phe	Ser	Ser	Ser	Leu	Arg	Arg	His	Glı
	210					215					220				
Arg	Thr	His	Thr	Glu	Lys	Leu	Cys	Glu	Cys	Lys	Gln	His	Gly	Lys	Gly
225					230					235					240

Phe	Phe	His	Arg	Ser	Cys	Pro	Arg	His	Met	Lys	Ile	Asp	Thr	Gly	Glu
				245					250					255	
Ile	Leu	His	Lys	Arg	Lys	Ile	Arg	Gly	Lys	Val	Phe	His	Ser	Pro	Ser
			260					265					270		
Ser	Phe	Gln	Thr	Cys	Glu	Arg	Ser	His	Thr	Arg	Glu	Lys	Arg	Tyr	Lys
		275					280					285			
Cys	Lys	Gln	Cys	Gly	Lys	Pro	Phe	Ile	Tyr	Phe	Asn	Ala	Phe	Gln	Arg
	290					295					300				
His	Gln	Arg	Ser	His	Thr	Gly	Glu	Asn	Pro	Tyr	Glu	Cys	Lys	Gln	Cys
305					310					315					320
Gly	Lys	Ala	Cys	Ile	Ser	Ser	Thr	Ala	Phe	Gln	Cys	Arg	Glu	Leu	Ser
	•			325					330					335	
His	Thr	Gly	Ala	Lys	Arg	Tyr	Lys	Cys	Lys	Gln	Cys	Gly	Lys	Gly	Phe
			340					345					350		
Asn	Leu	Pro	Ser	Ser	Ile	Arg	Tyr	His	Glu	Met	Thr	His	Thr	Gly	Glu
		355					360					365			
Lys	Pro	Tyr	Glu	Cys	Lys	Gln	Cys	Gly	Arg	Ala	Phe	Arg	Ser	Ala	Ser
	370					375					380				
His	Leu	Arg	Thr	His	Glu	Arg	Thr	His	Ile	Gly	Glu	Lys	Pro	Tyr	Glu
385					390					395					400
Cys	Lys	Gln	Cys	Gly	Lys	Val	Tyr	Arg	Tyr	Trp	Ser	Gly	Leu	Arg	Ile
				405					410					415	
His	Gly	Leu	Thr	His	Ile	Gly	Lys	Lys	Pro	Tyr	Glu	Phe	Asn	Asp	Arg
			420					425					430		
Gly	Lys	Ser	Phe	Tyr	Ser	Ser	Asn	Phe	Phe	Leu	Asn	His	Lys	Arg	Val
		435					440					445			
His	Thr	Arg	Val	Lys	Thr	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe
	450					455					460				
Asp	Asn	Pro	Thr	Ser	Phe	Gln	Lvs	His	Glu	Glv	Ser	His	Arg	Lys	Glv

<210> 3500

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3500

Met Leu Gly Thr His Pro Leu Ser Leu His Val Ser Ser Ser Ser Cys

1 5 10 15

Ser Ser Ser Pro Met His Gly Pro Pro Pro Thr Trp Leu Pro Gly Trp
20 25 30

Ala Gly Thr Met Gly Ser Cys Trp Leu Thr Ser Leu Leu Ser His Ser

35 40 45

Val Pro Ser Leu Val Ser Leu Ala Ser Leu Ala Ser His Lys Pro Ala 50 55 60

Tyr Leu Tyr His Thr Asp Ile Val Gly Pro Ser Ser Asp His Asn Ser
65 70 75 80

Asn Phe Ser Cys Phe Ala Val Pro Leu Leu Pro Ser Tyr His Leu Leu 85 90 95

Gln Val Val Leu Ser Lys His Leu Lys Ile Pro Ile Trp Ser Leu His 100 105 110

Lys Ala Ala Arg Cys Pro Lys His Lys Ala

115 120

<210> 3501

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3501

Met Gly Cys Val Ser Lys His Cys Ala Ala Pro Val Gln Ser Arg Ala

1 5 10 15

Pro Thr Ser Asn Phe Leu Ser Pro Asp Trp Arg Pro Ser Arg Cys Leu

20 25 30

Thr Leu His Trp His Cys Ser Cys Phe Trp Phe Ser Arg Gln Asp Val

35 40 45

Val Ser Phe Thr Val Phe Leu Ser Ala Leu Phe Cys Leu His Phe Phe

50 55 60

Ser His Leu Leu Thr Leu His Ser Ala Trp Gly Ile Pro Pro His Ser

65 70 75 80

Leu Gln Ser Tyr Ser Leu Asp Gln Thr Gln Leu Glu Ser Val Gln Pro

85 90 95

Ser Thr Phe Ser Pro His Leu Asp Pro Leu Cys Ala Gly Gly Asp Asn

100 105 110

His Thr Ser Arg Val Cys Cys Leu Glu Leu Thr Arg Leu Leu Phe

115 120 125

Gln Thr Gln Pro Met Ile Ser Pro Pro Ala Leu Glu

130 135 140

<210> 3502

<211> 366

<212> PRT

<213> Homo sapiens

<400> 3502

Met Ala Leu Ser Pro Pro Ala Ser Arg Gly Lys Leu Pro Gly Asp Phe

1 5 10 15

Asp Val Leu Pro Thr Gly Ile Pro Gly Arg Ala Val Leu Glu Arg Ser

20 25 30

Gln Ser Gly Gly Lys Pro Glu Pro Val Val Thr Val Arg Thr Gln Glu

35 40 45

Thr Asp Val Val Glu Met Thr Thr Gln Ala Lys Ser Pro Glu Ser Pro

50 55 60

Phe Thr Val Thr Lys Lys Glu Ser Lys Asp Ile Leu Ile Ser Gln Thr

65 70 75 80

Glu Glu Val Thr Leu Glu Ala Phe Arg Gly Gln Gly Lys Leu Glu Asp

85 90 95

Trp Ala His Trp Ala Lys Leu Glu Glu Arg Ser Pro Asp Leu Pro Gly

100 105 110

Val Arg Ser Lys Glu Leu Glu Gln Arg Lys Arg Trp Val Lys Ala Lys

115 120 125

Glu Leu Ala Val Glu Gly Pro Ser Gln Glu His Ser Arg Pro Phe Ser

130 135 140

Val Glu Ala Leu Thr Leu Thr Lys Leu Met Ile Thr Ala Asn Ser Lys

145 150 155 160

Glu Gln Arg Ser Lys Ser Ala Leu Val Ser Leu Pro Ser Trp Leu Leu

165 170 175

Ala Thr Pro Gln Ala Ser Ala Thr Ser Met Met Ala Ser Val Pro Ser

180 185 190

Arg	Pro	Gly	Gln	Leu	Ser	Leu	Leu	Glu	Gly	Lys	Pro	Val	Val	Val	Arg
		195					200					205			
Glu	Gln	Pro	Glu	Ser	His	Thr	Trp	Val	Lys	Glu	Gly	Lys	Arg	Pro	Trp
	210					215					220				
Gly	Glu	Met	Lys	Glu	Pro	Pro	Trp	Asp	Pro	Lys	Gly	Pro	Pro	Lys	Val
225					230					235					240
Pro	Phe	Arg	Ser	Lys	Pro	Thr	Ser	Ala	Ser	Leu	Lys	Arg	Glu	Gly	Ile
				245					250					255	
Ser	Gln	Ala	Pro	Ile	Pro	Leu	Thr	Ala	Ser	Pro	Trp	Glu	Asp	Leu	Arg
			260					265					270		
Pro	Ser	Pro	Leu	Ser	Glu	Thr	Leu	Ile	Ser	Lys	Met	Glu	Ala	Thr	Ala
		275					280					285			
Arg	Ala	Ser	Gln	Gln	Pro	Lys	Arg	Val	Ser	Gln	Glu	Pro	Met	Arg	Met
	290					295					300				
Pro	Ala	Gln	His	Pro	Leu	Ala	Thr	Val	Gly	Ser	Ser	Ser	Glu	Iŀe	Leu
305					310					315					320
Leu	Pro	Met	Leu	Leu	Glu	Leu	Glu	Thr	Val	Arg	Asn	Thr	Ala	Thr	Lys
				325					330					335	
Ala	Glu	Glu	Ile	Gln	Glu	Glu	Ser	Gly	Val	Leu	Asn	Leu	Leu	Pro	Ser
			340					345					350		
Leu	Gln	His	Ser	Gln	His	Ser	Glu	Trp	Pro	Asp	Ala	Gly	Ala		
		355					360					365			

<210> 3503

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3503

Met Arg Ser Ile Val Ser Ala Leu Ser Thr Ser His Ser Gly Cys Glu

1 5 10 15

Asp Gly Arg Arg Glu His Ser Trp Arg Leu Cys Ser Trp Gly Ala Ala

20 25 30

Pro Gly Cys Gly Thr Ala Ser His Arg Ala Val Pro Ala Gly His Trp

35 40 45

His Gln Lys Pro Gln Tyr Gln Arg Asp Thr Val Thr Pro Glu Leu Ser

50 55 60

Trp Arg Arg Leu Gln Ala Arg Ser Thr Pro Leu Ala Ser Ser Cys Leu

65 70 75 80

Lys Val Pro Leu Leu Ile Phe Tyr Ile Ile Ser Gln Ser Ser Leu Ala

85 90 95

Ser Asp Gly Glu Gly Thr Pro Arg Ser Leu Ile Pro Ala Pro Val Pro

100 105 110

Leu Pro His Pro Cys Leu Pro Leu Pro Leu Gly Arg Pro Arg Arg

115 120 125

Pro Pro Trp Ser Ser Asp Thr Ala Ala Val Ala Pro Ala Ala Leu Cys

130 135 140

Ser Ala Ala Pro Glu Asn Cys Phe Pro Ala Ala Ala Trp Pro Ser Gly

145 150 155 160

Ser Gly Gln Gly Phe Gly Gln Lys Asn Arg Leu Glu Ala His

165 170

<210> .3504

<211> 506

<212> PRT

<213> Homo sapiens

<400> 3504

Met Lys Arg Arg Ser Val Thr Met Thr Asp Gly Leu Thr Ala Asp Lys

1 5 10 15

Val Thr Arg Ser Asp Gly Cys Pro Thr Ser Thr Ser Leu Pro Arg Pro
20 25 30

Arg Asp Ser Ile Arg Ser Cys Ala Leu Ser Met Asp Gln Ile Pro Asp 35 40 45

Leu His Ser Pro Met Ser Pro Ile Ser Glu Ser Pro Ser Ser Pro Ala
50 55 60

Tyr Ser Thr Val Thr Arg Val His Ala Ala Pro Ala Ala Pro Ser Ala 65 70 75 80

Thr Ala Leu Pro Ala Ser Pro Val Ala Arg Arg Ser Ser Glu Pro Gln
85 90 95

Leu Cys Pro Gly Ser Ala Pro Lys Thr His Gly Glu Ser Asp Lys Gly
100 105 110

Pro His Thr Ser Pro Ser His Thr Leu Gly Lys Ala Ser Pro Ser Pro 115 120 125

Ser Leu Ser Ser Tyr Ser Asp Pro Asp Ser Gly His Tyr Cys Gln Leu 130 135 140

Gln Pro Pro Val Arg Gly Ser Arg Glu Trp Ala Ala Thr Glu Thr Ser 145 150 155 160

Ser Gln Gln Ala Arg Ser Tyr Gly Glu Arg Leu Lys Glu Leu Ser Glu 165 170 175

Asn Gly Ala Pro Glu Gly Asp Trp Gly Lys Thr Phe Thr Val Pro Ile
180 185 190

Val Glu Val Thr Ser Ser Phe Asn Pro Ala Thr Phe Gln Ser Leu Leu 195 200 205

Ile Pro Arg Asp Asn Arg Pro Leu Glu Val Gly Leu Leu Arg Lys Val

	210					215					220				
Lys	Glu	Leu	Leu	Ala	Glu	Val	Asp	Ala	Arg	Thr	Leu	Ala	Arg	His	Val
225					230					235					240
Thr	Lys	Val	Asp	Cys	Leu	Val	Ala	Arg	Ile	Leu	Gly	Val	Thr	Lys	Glu
				245					250					255	
Met	Gln	Thr	Leu	Met	Gly	Val	Arg	Trp	Gly	Met	Glu	Leu	Leu	Thr	Leu
			260					265					270		
Pro	His	Gly	Arg	Gln	Leu	Arg	Leu	Asp	Leu	Leu	Glu	Arg	Phe	His	Thr
		275					280					285			
Met	Ser	Ile	Met	Leu	Ala	Val	Asp	Ile	Leu	Gly	Cys	Thr	Gly	Pro	Ala
	290					295					300				
Glu	Glu	Arg	Ala	Ala	Leu	Leu	His	Lys	Thr	Ile	Gln	Leu	Ala	Ala	Glu
305					310					315					320
Leu	Arg	Gly	Thr	Met	Gly	Asn	Met	Phe	Ser	Phe	Ala	Ala	Val	Met	Gly
			•	325					330					335	
Ala	Leu	Asp	Met	Ala	Gln	Ile	Ser	Arg	Leu	Glu	Gln	Thr	Trp	Val	Thr
,			340					345					350		
Leu	Arg	Gln	Arg	His	Thr	Glu	Gly	Ala	Ile	Leu	Tyr	Glu	Lys	Lys	Leu
		355					360					365			
Lys	Pro	Phe	Leu	Lys	Ser	Leu	Asn	Glu	Gly	Lys	Glu	Gly	Pro	Pro	Leu
	370					375					380				
Ser	Asn	Thr	Thr	Phe	Pro	His	Val	Leu	Pro	Leu	Ile	Thr	Leu	Leu	Glu
385					390					395					400
Cys	Asp	Ser	Ala	Pro	Pro	Glu	Gly	Pro	Glu	Pro	Trp	Gly	Ser	Thr	Glu
				405					410					415	
His	Gly	Val	Glu	Val	Val	Leu	Ala	His	Leu	Glu	Ala	Ala	Arg	Thr	Val
			420					425					430		
Ala	His	His	Gly	Gly	Leu	Tyr	His	Thr	Asn	Ala	Glu	Val	Lys	Leu	Gln
		435				٠	440					445			

Gly Phe Gln Ala Arg Pro Glu Leu Leu Glu Val Phe Ser Thr Glu Phe 460 450 455 Gln Met Arg Leu Leu Trp Gly Ser Gln Gly Ala Ser Ser Gln Ala 470 475 480 465 Arg Arg Tyr Glu Lys Phe Asp Lys Val Leu Thr Ala Leu Ser His Lys 490 495 485 Leu Glu Pro Ala Val Arg Ser Ser Glu Leu 500 505

<210> 3505

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3505

Met Gly Val Ser Val Ser Pro Leu Ile Thr Leu Pro Ala Trp Cys Asn
1 5 10 15

Val His Met Leu Ser Phe Ile Thr Ala Met Gly Thr Glu Arg Gln Phe
20 25 30

Met Leu Ser Pro His Gly Ala Leu Arg Ser Ile Ser Thr His His Pro
35 40 45

Ala Leu Thr Val Ile Cys Leu Thr Pro Leu Ala Leu Leu Phe Phe Leu 50 55 60

Glu His Asp Asn Leu Pro Pro Ala Ala Pro Ala Gln Ser Gln Asp Val 65 70 75 80

Cys Met Cys Arg Gly Pro Cys Thr Leu Phe Pro Gln Leu Leu Ala Cys
85 90 95

Leu Phe Pro Ser His Tyr Pro Cys Leu Cys Leu Ser Ile Ser Ser Ser

100 105 110

Glu Val Leu Leu Thr Ser Pro Leu Gln Val Pro Phe Pro Leu Pro Pro
115 120 125

Cys Gly Ser Val Ala Pro Ser Thr Leu Gln Leu Cys Ser Phe Pro 130 135 140

<210> 3506

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3506

Met Leu Cys Gln Leu Leu Thr Pro Gly Ser Cys Pro Ala Leu Pro Cys

1 5 10 15

Val Pro Thr Pro Pro Pro Pro Ala Met Pro His Thr Cys Leu Ser Pro
20 25 30

Gln Ala Arg Ala Leu Ser Cys Gly Tyr Pro Arg Lys Gln Pro Ser Lys
35 40 45

Ser Phe Val Ala Met Val Leu Pro Trp Gly Pro Cys Ser Cys Ser Ala 50 55 60

Ala Pro Pro Thr Thr Arg Trp Trp Gly Leu Gly Ser Ser Pro Ala Pro
65 70 75 80

Gly Arg Gly Ala Ser Leu Ser Gly Leu Gln Gly Pro Gln Cys Ala Asn 85 90 95

Val Arg Thr Pro Leu Ser Ala Arg Trp Leu Trp Gly Trp Gly Met Ala 100 105 110

Pro Asn Pro Val Met Gly Met Val Trp Val Gly Met Ala Trp Val Ser 115 120 125 Thr His Lys Gln Leu Gly Gln Cys Val Gly Ser His Ser Gln His

<210> 3507

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3507

Met Ala Pro Arg Thr Leu Leu Leu Leu Ser Gly Ala Leu Val Leu

Thr Gln Thr Trp Ala Gly Phe His Ser Leu Arg Tyr Phe His Thr Thr

Met Ser Arg Pro Gly Arg Ala Asp Pro Arg Phe Leu Ser Val Gly Asp

Val Asp Asp Thr Gln Cys Val Arg Leu Asp Ser Asp Ala Thr Ser Pro

Arg Met Glu Pro Glu Gly Pro Glu Tyr Trp Glu Glu Glu Thr Gly Thr

Ala Lys Ala Lys Ala Gln Phe Tyr Arg Val Asn Leu Arg Thr Leu Ser

Gly Tyr Tyr Asn Gln Ser Glu Ala Trp Ala Ala Ser His Thr Glu Ser

Trp Thr Gly Leu Tyr Arg His Asn Leu Val Pro Ala Trp Met Lys Pro

Ser Glu Glu Trp Leu Pro Ser Phe Arg Met Trp Cys Met Tyr

<210> 3508 <211> 808 <212> PRT <213> Homo sapiens <400> 3508 Met Ala Glu Ser Ser Glu Ser Phe Thr Met Ala Ser Ser Pro Ala Gln Arg Arg Gly Asn Asp Pro Leu Thr Ser Ser Pro Gly Arg Gly Leu Gly Arg Met Arg Arg Gly Leu Leu Tyr Asp Ser Asp Glu Glu Asp Glu Glu Arg Pro Ala Arg Lys Arg Arg Gln Val Glu Arg Ala Thr Glu Asp Gly Glu Glu Asp Glu Glu Met Ile Glu Ser Ile Glu Asn Leu Glu Asp Leu Lys Gly His Ser Val Arg Glu Trp Val Ser Met Ala Gly Pro Arg Leu Glu Ile His His Arg Phe Lys Asn Phe Leu Arg Thr His Val Asp Ser His Gly His Asn Val Phe Lys Glu Arg Ile Ser Asp Met Cys Lys Glu Asn Arg Glu Ser Leu Val Val Asn Tyr Glu Asp Leu Ala Ala Arg Glu His Val Leu Ala Tyr Phe Leu Pro Glu Ala Pro Ala Glu Leu Leu

Gln Ile Phe Asp Glu Ala Ala Leu Glu Val Val Leu Ala Met Tyr Pro

Lys	Tyr	Asp	Arg	Ile	Thr	Asn	His	Ile	His	Val	Arg	Ile	Ser	His	Leu
			180					185					190		
Pro	Leu	Val	Glu	Glu	Leu	Arg	Ser	Leu	Arg	Gln	Leu	His	Leu	Asn	Gln
		195					200					205			
Leu	Ile	Arg	Thr	Ser	Gly	Val	Val	Thr	Ser	Cys	Thr	Gly	Val	Leu	Pro
	210					215					220				
Gln	Leu	Ser	Met	Val	Lys	Tyr	Asn	Cys	Asn	Lys	Cys	Asn	Phe	Val	Leu
225					230					235					240
Gly	Pro	Phe	Cys	Gln	Ser	Gln	Asn	Gln	Glu	Val	Lys	Pro	Gly	Ser	Cys
				245					250					255	
Pro	Glu	Cys	Gln	Ser	Ala	Gly	Pro	Phe	Glu	Val	Asn	Met	Glu	Glu	Thr
			260					265					270		
Ile	Tyr	Gln	Asn	Tyr	Gln	Arg	Ile	Arg	Ile	Gln	Glu	Ser	Pro	Gly	Lys
		275					280					285			
Val	Ala	Ala	Gly	Arg	Leu	Pro	Arg	Ser	Lys	Asp	Ala	Ile	Leu	Leu	Ala
	290					295					300				
Asp	Leu	Val	Asp	Ser	Cys	Lys	Pro	Gly	Asp	Glu	Ile	Glu	Leu	Thr	Gly
305					310					315					320
Ile	Tyr	His	Asn	Asn	Tyr	Asp	Gly	Ser	Leu	Asn	Thr	Ala	Asn	Gly	Phe
				325					330					335	
Pro	Val	Phe	Ala	Thr	Val	Ile	Leu	Ala	Asn	His	Val	Ala	Lys	Lys	Asp
			340					345					350		
Asn	Lys	Val	Ala	Val	Gly	Glu	Leu	Thr	Asp	Glu	Asp	Val	Lys	Met	Ile
		355					360					365			
Thr	Ser	Leu	Ser	Lys	Asp	Gln	Gln	Ile	Gly	Glu	Lys	Ile	Phe	Ala	Ser
	370					375					380				
Ile	Ala	Pro	Ser	Ile	Tyr	Gly	His	Glu	Asp	Ile	Lys	Arg	Gly	Leu	Ala
385					390					395					400
Leu	Ala	Leu	Phe	Gly	Gly	Glu	Pro	Lys	Asn	Pro	Gly	Gly	Lys	His	Lys

				405					410					415	
Val	Arg	Gly	Asp	Ile	Asn	Val	Leu	Leu	Cys	Gly	Asp	Pro	Gly	Thr	Ala
			420					425					430		
Lys	Ser	Gln	Phe	Leu	Lys	Tyr	Ile	Glu	Lys	Val	Ser	Ser	Arg	Ala	Ile
		435					440					445			
Phe	Thr	Thr	Gly	Gln	Gly	Ala	Ser	Ala	Val	Gly	Leu	Thr	Ala	Tyr	Val
	450					455					460				
Gln	Arg	His	Pro	Val	Ser	Arg	Glu	Trp	Thr	Leu	Glu	Ala	Gly	Ala	Leʻu
465					470					475					480
Val	Leu	Ala	Asp	Arg	Gly	Val	Cys	Leu	Ile	Asp	Glu	Phe	Asp	Lys	Met
				485					490					495	
Asn	Asp	Gln	Asp	Arg	Thr	Ser	Ile	His	Glu	Ala	Met	Glu	Gln	Gln	Ser
			500					505					510		
Ile	Ser	Ile	Ser	Lys	Ala	Gly	Ile	Val	Thr	Ser	Leu	Gln	Ala	Arg	Cys
		515					520					525			
Thr	Val	Ile	Ala	Ala	Ala	Asn	Pro	Ile	Gly	Gly	Arg	Tyr	Asp	Pro	Ser
	530					535					540				
Leu	Thr	Phe	Ser	Glu	Asn	Val	Asp	Leu	Thr	Glu	Pro	Ile	Ile	Ser	Arg
545					550					555					560
Phe	Asp	Ile	Leu	Cys	Val	Val	Arg	Asp	Thr	Val	Asp	Pro	Val	Gln	Asp
				565					570					575	
Glu	Met	Leu	Ala	Arg	Phe	Val	Val	Gly	Ser	His	Val	Arg	His	His	Pro
			580					585					590		
Ser	Asn	Lys	Glu	Glu	Glu	Gly	Leu	Ala	Asn	Gly	Ser	Ala	Ala	Glu	Pro
		595					600					605			
Ala	Met	Pro	Asn	Thr	Tyr	Gly	Val	Glu	Pro	Leu	Pro	Gln	Glu	Val	Leu
	610					615					620				
Lys	Lys	Tyr	Ile	Ile	Tyr	Ala	Lys	Glu	Arg	Val	His	Pro	Lys	Leu	Asn
625					630					635					640

Gln Met Asp Gln Asp Lys Val Ala Lys Met Tyr Ser Asp Leu Arg Lys Glu Ser Met Ala Thr Gly Ser Ile Pro Ile Thr Val Arg His Ile Glu Ser Met Ile Arg Met Ala Glu Ala His Ala Arg Ile His Leu Arg Asp Tyr Val Ile Glu Asp Asp Val Asn Met Ala Ile Arg Val Met Leu Glu Ser Phe Ile Asp Thr Gln Lys Phe Ser Val Met Arg Ser Met Arg Lys Thr Phe Ala Arg Tyr Leu Ser Phe Arg Arg Asp Asn Asn Glu Leu Leu Leu Phe Ile Leu Lys Gln Leu Val Ala Glu Gln Val Thr Tyr Gln Arg Asn Arg Phe Gly Ala Gln Gln Asp Thr Ile Glu Val Pro Glu Lys Asp Leu Val Asp Lys Ala Arg Gln Ile Asn Ile His Asn Leu Ser Ala Phe Tyr Asp Ser Glu Leu Phe Arg Met Asn Lys Phe Ser His Asp Leu Lys

Arg Arg Met Ile Leu Gln Gln Phe

<210> 3509

<211> 286

<212> PRT

<213> Homo sapiens

<400>	3509

Met	Ile	Arg	Cys	Asp	Pro	Cys	Thr	Leu	Val	Glu	Glu	Arg	Ala	Ser	Arg
1				5					10					15	

Tyr Ser Ala Phe Pro Arg Ser His Lys Gln Pro Val Met Gly Ala Pro
20 25 30

Leu Ile Lys Leu Met Lys Ala Ser Ser Leu Pro Phe Tyr His Arg Cys
35 40 45

Cys Asp Lys Arg Leu Trp Thr Lys Ile Asp Leu Ser Arg Cys Lys Ala
50 55 60

Ile Val Pro Gln Ala Leu Ser Gly Ile Ile Lys Arg Gln Pro Val Ser 65 70 75 80

Leu Asp Leu Ser Trp Thr Asn Ile Ser Lys Lys Gln Leu Thr Trp Leu

85 90 95

Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly Cys Ser

100 105 110

Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu Leu Arg
115 120 125

Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln Ile Arg
130 135 140

Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn Arg Ser 145 150 155 160

Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp Ile Thr
165 170 175

Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu Ser Arg 180 185 190

Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser Asn Leu 195 200 205

Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu Leu Asn 210 215 220 Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr Leu Arg 225 230 235 240 Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys Gln Ile 250 255 245 Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile Asn Ser 265 270 260 Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser 280 285 275

<210> 3510

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3510

Met Val Cys Phe Asn Met Gly Arg Ile Thr Leu Ala Lys Lys Leu Ala
1 5 10 15

Arg Lys Ala Leu Arg Leu Lys Arg Asn Phe Pro Trp Thr Trp Phe
20 25 30

Gly Val Leu Phe Gln Thr Phe Leu Glu Lys Tyr Trp His Ser Cys Thr
35 40 45

Leu Ser Gln Pro Pro Asn Asp Pro Ser Glu Lys Leu Ser Leu Pro Met
50 55 60

Trp Ser Ser Leu Ser Ser Pro Arg Val Trp Ala Ser Arg Thr Ser Gly
65 70 75 80

Cys Thr Val Ser Arg Trp Pro Phe Arg Lys Ala Val Tyr Val Gly Ser 85 90 95

Pro Gly Arg Gly Cys Trp Pro Gln Leu Ser Ser Cys Arg Pro Trp Pro

Thr Pro Ser Ser Ala Leu Val Ile Leu Thr Ser Pro Ser Ser Trp Val Met Gly Leu Arg Asp Gly Gly Ser Arg Ala Phe Arg Glu Tyr Met Phe Thr Ala Arg Pro His Met Val Leu Leu Asn Leu Leu Arg Phe Ser Ser Ser <210> 3511 <211> 169

<212> PRT

<213> Homo sapiens

<400> 3511

Met Glu Leu Glu Ala Ile Ile Leu Ser Glu Val Thr Gln Gly Gln Lys

Thr Lys Tyr Arg Met Phe Ser Gln Val Gly Thr Lys Leu Trp Val Ser

Lys Gly Ile Gln Ser Ala Ile Met Asp Thr Gly Asp Ser Glu Met Gly

Arg Met Gly Arg Ala Arg Trp Leu Thr Pro Val Ile Pro Thr Leu Arg

Glu Ala Glu Ala Gly Val Ser Pro Glu Ile Arg Gly Ser Lys Pro Ala

Arg Pro Thr Trp Arg Asn Pro Val Ser Thr Lys Ser Thr Lys Lys Leu

Ala Gly His Gly Gly Ala Cys Leu Gln Pro Arg Pro Leu Gly Arg Leu 100 105 110 Arg Gln Glu Asn Arg Pro Asn Leu Gly Asp Gly Gly Cys Ser Glu Pro 115 120 125 Gly Ser Cys His Ser Thr Pro Ala Trp Ala Thr Glu Arg Asp Ser Val 135 130 140 Ser Lys Lys Lys Lys Lys Lys Lys Lys Ser Leu Pro Phe Val 150 160 145 155 Gln Phe Thr Val Cys His Phe Arg Leu 165

<210> 3512

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3512

Met Asp Leu Ala Pro Leu Ile Phe Ser Gly Lys Leu Ile Pro Gln Ala
1 5 10 15

Pro Ser Leu Leu Met Leu Leu Phe Pro Glu Phe Pro Ser Ile Cys Arg
20 25 30

Arg Leu Cys Ser Ser Ala Glu Pro Ser Thr Lys Gln Asp Val Leu His
35 40 45

Cys Glu Ala Val Leu Pro Gly Gly Thr Val Thr Arg His Phe Phe Gly 50 55 60

Ala Ser Leu Gln Lys Ser Gln Asn Thr Arg Pro Ala Ser Ser Tyr His
65 70 75 80

Ser Cys Leu Leu Cys Pro Val Leu Gly Pro Pro Ser Pro Cys Ala Asn

85 90 95

Thr Pro Arg Gly Leu Ser Cys Gly Arg Asp Ala Gly Ser His Ser Ser
100 105 110

Arg Trp Thr Val Leu Glu Gly Pro

115 120

<210> 3513

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3513

Met Tyr Ser Thr Val Ala Leu Pro Val Asp Asn Val Ile Thr Phe Ser

1 5 10 15

Phe Cys Phe Lys Thr Phe Leu Phe Leu Gln Ala Gly Gln Ala Phe Arg

20 25 30

Lys Phe Leu Pro Leu Phe Asp Arg Val Leu Val Glu Arg Ser Ala Ala

35 40 45

Glu Thr Val Thr Lys Gly Gly Ile Met Leu Pro Glu Lys Ser Gln Gly

50 55 60

Lys Val Leu Gln Ala Thr Val Val Ala Val Gly Ser Gly Ser Lys Gly

65 70 75 80

Lys Val Asn Gly Ser Cys Ser Gly Thr Ile Phe Tyr Ser Val Gln Trp

85 90 95

Arg Glu Lys Lys

100

<210> 3514

<211> 528

<212> PRT

<213> Homo sapiens

<400> 3514

Met Asp His Cys Gly Ala Leu Phe Leu Cys Leu Cys Leu Leu Thr Leu

1 5 10 15

Gln Asn Ala Thr Thr Glu Thr Trp Glu Glu Leu Leu Ser Tyr Met Glu
20 25 30

Asn Met Gln Val Ser Arg Gly Arg Ser Ser Val Phe Ser Ser Arg Gln
35 40 45

Leu His Gln Leu Glu Gln Met Leu Leu Asn Thr Ser Phe Pro Gly Tyr
50 55 60

Asn Leu Thr Leu Gln Thr Pro Thr Ile Gln Ser Leu Ala Phe Lys Leu 65 70 75 80

Ser Cys Asp Phe Ser Gly Leu Ser Leu Thr Ser Ala Thr Leu Lys Arg 85 90 95

Val Pro Gln Ala Gly Gly Gln His Ala Arg Gly Gln His Ala Met Gln
100 105 110

Phe Pro Ala Glu Leu Thr Arg Asp Ala Cys Lys Thr Arg Pro Arg Glu
115 120 125

Leu Arg Leu Ile Cys Ile Tyr Phe Ser Asn Thr His Phe Phe Lys Asp 130 135 140

Glu Asn Asn Ser Ser Leu Leu Asn Asn Tyr Val Leu Gly Ala Gln Leu 145 150 155 160

Ser His Gly His Val Asn Asn Leu Arg Asp Pro Val Asn Ile Ser Phe 165 170 175

Trp His Asn Gln Ser Leu Glu Gly Tyr Thr Leu Thr Cys Val Phe Trp

			180					185					190		
Lys	Glu	Gly	Ala	Arg	Lys	Gln	Pro	Trp	Gly	Gly	Trp	Ser	Pro	Glu	Gly
		195					200					205			
Cys	Arg	Thr	Glu	Gln	Pro	Ser	His	Ser	Gln	Val	Leu	Cys	Arg	Cys	Asn
	210					215					220				
His	Leu	Thr	Tyr	Phe	Ala	Val	Leu	Met	Gln	Leu	Ser	Pro	Ala	Leu	Val
225					230					235					240
Pro	Ala	Glu	Leu	Leu	Ala	Pro	Leu	Thr	Tyr	Ile	Ser	Leu	Val	Gly	Cys
				245					250					255	
Ser	Ile	Ser	Ile	Val	Ala	Ser	Leu	Ile	Thr	Val	Leu	Leu	His	Phe	His
			260					265					270		
Phe	Arg	Lys	Gln	Ser	Asp	Ser	Leu	Thr	Arg	Ile	His	Met	Asn	Leu	His
		275					280					285			
Ala	Ser	Val	Leu	Leu	Leu	Asn	Ile	Ala	Phe	Leu	Leu	Ser	Pro	Ala	Phe
	290					295					300				
Ala	Met	Ser	Pro	Val	Pro	Gly	Ser	Ala	Cys	Thr	Ala	Leu	Ala	Ala	Ala
305		•			310					315					320
Leu	His	Tyr	Ala	Leu	Leu	Ser	Cys	Leu	Thr	Trp	Met	Ala	Ile	Glu	Gly
				325					330					335	
Phe	Asn	Leu	Tyr	Leu	Leu	Leu	Gly	Arg	Val	Tyr	Asn	Ile	Tyr	Ile	Arg
			340					345					350		
Arg	Tyr	Val	Phe	Lys	Leu	Gly	Val	Leu	Gly	Trp	Gly	Ala	Pro	Ala	Leu
		355					360					365			
Leu	Val	Leu	Leu	Ser	Leu	Ser	Val	Lys	Ser	Ser	Val	Tyr	Gly	Pro	Cys
	370					375					380				
Thr	Ile	Pro	Val	Phe	Asp	Ser	Trp	Glu	Asn	Gly	Thr	Gly	Phe	Gln	Asn
385					390					395					400
Met	Ser	Ile	Cys	Trp	Val	Arg	Ser	Pro	Val	Val	His	Ser	Val	Leu	Val
				105					410					415	

Met Gly Tyr Gly Gly Leu Thr Ser Leu Phe Asn Leu Val Val Leu Ala 420 425 430 Trp Ala Leu Trp Thr Leu Arg Arg Leu Arg Glu Arg Ala Asp Ala Pro 435 440 445 Ser Val Arg Ala Cys His Asp Thr Val Thr Val Leu Gly Leu Thr Val 455 460 450 Leu Leu Gly Thr Thr Trp Ala Leu Ala Phe Phe Ser Phe Gly Val Phe 480 470 475 465 Leu Leu Pro Gln Leu Phe Leu Phe Thr Ile Leu Asn Ser Leu Tyr Gly 485 490 495 Phe Phe Leu Phe Leu Trp Phe Cys Ser Gln Arg Cys Arg Ser Glu Ala 500 505 510 Glu Ala Lys Ala Gln Ile Glu Ala Phe Ser Ser Gln Thr Thr Gln 515 520 525

<210> 3515

<211> 539

<212> PRT

<213> Homo sapiens

<400> 3515

Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Glu Phe Ile Phe 35 40 45

Arg Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Glu Gly Leu

	50					55					60				
Gln	Trp	Val	Ser	Gly	Ile	Ser	Gly	Ser	Gly	Gln	Ser	Thr	Trp	Tyr	Thr
65					70					75					80
Asp	Ser	Val	Glu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Glu	Asn
				85					90					95	
Thr	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val
			100					105					110		
Tyr	Tyr	Cys	Ala	Lys	Asp	Met	Gly	Val	Thr	Arg	Ser	Arg	Tyr	Phe	Asp
		115					120					125			
Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Ala	Val	Ser	Ser	Ala	Ser	Thr	Lys
	130					135					140				
Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly
145					150					155					160
Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro
				165					170					175	
Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr
			180					185					190		
Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val
		195					200					205			
Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn
	210					215					220				
Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Arg	Val	Glu	Pro
225					230					235					240
Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu
				245					250					255	
Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp
			260					265					270		
Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp
		275					280					285			

Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly
	290					295					300				
Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn
305					310					315					320
Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp
				325					330					335	
Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro
			340					345					350		
Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu
		355					360					365		•	
Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu	Met	Thr	Lys	Asn
	370					375					380				
Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile
385					390					395					400
Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr
				405					410					415	
Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys
			420					425					430		
Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys
		435					440					445			
Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu
	450					455				•	460				
Ser	Leu	Ser	Pro	Glu	Leu	Gln	Leu	Glu	Glu	Ser	Cys	Ala	Glu	Ala	Gln
465					470					475					480
Asp	Gly	Glu	Leu	Asp	Gly	Leu	Trp	Thr	Thr	Ile	Thr	Ile	Phe	Ile	Thr
				485					490					495	
Leu	Phe	Leu	Leu	Ser	Val	Cys	Tyr	Ser	Ala	Thr	Val	Thr	Phe	Phe	Lys
			500					505					510		
Val	Lvs	Trp	Ile	Phe	Ser	Ser	Val	Val	Asp	Leu	Lvs	Gln	Thr	Ile	Ile

515 520 525

Pro Asp Tyr Arg Asn Met Ile Gly Gln Gly Ala
530 535

<210> 3516

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3516

Met Leu Phe Phe Arg His Ala Arg Lys His Phe Ser Gln Ala Glu Gly

1 5 10 15

Ser Gln Leu Asp Glu Val Arg Gln Ala Met Gly Met Leu Ala Phe Pro

20 25 30

Pro Asp Thr His Ile Ser Pro Tyr Lys Asp Leu Leu Asp Pro Ala Arg

35 40 45

Trp Arg Met Leu Ile Gln Gln Phe Arg Tyr Asp Asn Tyr Arg Leu His

50 55 60

Gln Leu Gly Asn Asn Ser Val Phe Thr Leu Thr Leu Gln Ala Gly Leu

65 70 75 80

Ser Ala Ile Lys Thr Pro Tyr Pro Thr Ser Arg Ala Gln Cys Gly Leu

85 90 95

Ala Trp Gly Trp His Leu Trp Ser Tyr Phe Asn Thr Leu Thr Leu His

100 105 110

Leu Ala Thr Leu Val Leu Pro Pro Gln Thr Ala Pro Ser Ser Arg Val

115 120 125

Leu His Leu Arg Gly Val Trp Met Val Gly Val Gly Pro Cys

130 135 140

<210> 3517

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3517

Met Ser Pro Val Gly Cys Pro Pro Val Ala Ser Arg Leu Arg Pro Trp

1 5 10 15

Gln Glu Glu Val Ala Leu Leu Leu Pro Leu Arg Glu Ala Gln Val Pro
20 25 30

Leu Gly Asp Glu His Leu Ala Pro Phe Leu Val Tyr Val Pro Phe Ser 35 40 45

Thr Ser Glu Leu Tyr Asn Gly Lys Asp Tyr Lys Pro Thr Phe Ser Glu
50 55 60

Lys Pro Gln Val Leu Thr Ser Leu Met Glu Ser Met Leu Trp Thr His
65 70 75 80

Trp Pro Thr Trp Asp Asp Cys Gln Gln Leu Leu Leu Thr Leu Phe Asn
85 90 95

Ala Glu Glu Lys Glu Gln Ile Gln Arg Glu Ala Ser Lys Tyr Phe Leu 100 105 110

Thr Ser Ala Asn Arg Pro Glu Val Glu Ala Arg Gly Leu Leu Lys Glu
115 120 125

Val Phe Pro Ser Thr Arg Pro Asn 130 135

<210> 3518

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3518

Met Ala Lys Leu Val Gln Glu Glu His Gly Lys Val Gly Ile Leu Tyr

1 5 10 15

Ser Ala Val Val Pro Ser Gly Phe Leu Cys Ser Leu Val Asp Val Leu

20 25 30

Cys Val His Leu Thr Leu Leu Gly Gly Thr Glu Ile Ser Leu Leu Gly

35 40 45

Lys Ile Gln Tyr Asp Val Ile Gly Ala Leu Pro Ser Leu Ser Cys Leu

50 55 60

Pro Phe Ser Trp Glu Pro Ile His Val Thr Glu Thr Thr Tyr Trp Ser

65 70 75 80

Lys Thr Asp Cys Lys Ser Ser Gly Tyr Ile Gly Thr Phe Leu Val Ser

85 90 95

Ser Leu Leu Gln Pro Gly Ile Met Glu Gly Val Trp Ile Lys

100 105 110

<210> 3519

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3519

Met His Leu Leu Leu Glu Asn Arg Leu Leu Pro Cys Gln Thr Pro

1 5 10 15

Val Leu Tyr Ile Leu Trp Ser Val Thr Thr Gln Ser Val Val His Gly 20 25 30 Pro Glu Leu Leu Gly Ser Pro Gly Ser Leu Leu Arg Ser Ala Glu Pro 35 40 45 Gln Val Pro Pro Gln Thr Trp Asp Ser Asp Pro Leu Asn Gln Ile Cys 55 50 60 Ile Phe Ile Lys Ala Pro Gly Asp Leu Cys Thr Gln Gln Ser Leu Arg 70 65 75 80 Ser Pro Ala Ser Glu Leu Thr Ser Phe Thr Pro Arg Gly Pro Asn Ile 85 90 95 Ala Glu Glu Thr Arg Gly Phe Gln His Lys Val Ala Leu Asp Leu Gln 100 105 110 Pro Met Glu Tyr Ile Arg Asp Val Ser Ala Leu Leu Trp Gly 115 120 125

<210> 3520

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3520

Met Gly Leu Arg Ala Asp Ser Pro Ser Leu Lys Val Ala Val Ser Ile

1 5 10 15

Gln Ser Pro Pro Ser Ser Pro Gln Gly Lys Ser Gly Pro Leu Glu His

20 . 25 . 30

Pro Thr Asp Pro Ser Trp Leu Leu Cys Phe Leu His Thr Gln Ala His

35 40 45

Leu Thr Cys Arg Ala Pro Ser Cys Ser Arg Ala Leu Leu Ser Arg Phe

Pro Pro Ser Met Leu Ser Thr His His Ser Gly Trp Leu His Ser Pro 65 70 75 80

Ile Ser Glu Val Gln Pro Gln Val Thr Ser Ser Glu Asn Phe Phe Leu 85 90 95

Thr Ala Gln Pro Ser Arg Ile Leu Leu Ser Gln Ser Ser Ser Val

105

110

100

<210> 3521

<211> 205

<212> PRT

<213> Homo sapiens

<400> 3521

Met Ala Glu Phe Ser Gln Lys Arg Gly Lys Arg Arg Ser Asp Glu Gly

1 5 10 15

Leu Gly Ser Met Val Asp Phe Leu Leu Ala Asn Ala Arg Leu Val Leu 20 25 30

Gly Val Gly Gly Ala Ala Val Leu Gly Ile Ala Thr Leu Ala Val Lys
35 40 45

Arg Phe Ile Asp Arg Ala Thr Ser Pro Arg Asp Glu Asp Asp Thr Lys
50 55 60

Ala Asp Ser Trp Lys Glu Leu Ser Leu Leu Lys Ala Thr Pro His Leu
65 70 75 80

Gln Pro Arg Pro Pro Pro Ala Ala Leu Ser Gln Pro Val Leu Pro Leu 85 90 95

Ala Pro Ser Ser Ala Pro Gly Glu Ala Ala Gly Leu Arg Ala Gly
100 105 110

Pro Cys Asp His Pro Ser Ser Pro Gly Gly Phe Gly Gln Thr Ala Gly Trp Arg His Arg Pro Gly Ala Ala Gly Leu Leu Ser Glu Gln Val Pro Gly Thr Ala Leu Trp Gly Ile Arg Ala Trp Gly Ala Ala Leu Arg Arg Ala Ala Gly Gly Gly Cys Gly Pro Cys Ala Ser Pro Gly Ala Thr Gly Ala Gly Ala Gly Pro Val Glu Pro Gly Ala Gly Arg Gly His Cys Gly Glu Gly Pro Ser Leu Leu Gly Arg Ala Gln Asp Ala Ala

<210> 3522

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3522

Met Leu Val Phe Leu Gln Glu Met Asp Lys Pro Cys Gly Cys Pro Pro Gly Val Cys Asp His Gly Thr Gly Asp Arg Arg Asp Pro Trp Tyr Ser Thr Val Gly Leu Leu Pro Pro Val Arg Ala Met Ser Gln Arg Asn Leu Asn Ala Lys Thr Glu Gln Gly Pro Thr Gly Val Thr Met Thr Ser Asn Pro Ile Thr Trp Gly Gln Ile Lys Lys Thr Thr Gln Glu Ala Glu Lys

Leu Leu Glu Arg Gln Gly Gln Ala Lys Thr Pro Asp Ser Met Phe Leu Ala Met Leu Ala Val Val Ser Cys Ala Val Cys Phe Pro Cys Val Glu

Ala Lys Thr Tyr Trp Ala Tyr Val Pro Asn Pro Leu Val Val Arg Leu

Val Leu Trp Ser Asp Thr Pro Pro Glu Ile Tyr Tyr Asp Gln Gly Ala

Trp Ala Pro Gly Pro Leu Thr Pro Ser Asp Thr Glu Gln

<210> 3523

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3523

Met Pro Pro Cys Pro Val Asn Phe Tyr Ile Phe Ser Arg Asp Arg Val

Leu Pro Cys Trp Pro Gly Trp Ser Arg Thr Pro Asp Leu Pro Arg Pro

Pro Lys Val Leu Gly Leu Gln Pro Arg Leu Arg Thr Phe Asn Ser Cys

Ser Val Leu Pro Asp Phe Arg Gly Leu Leu Thr Val Arg Tyr Lys Thr

Ser Cys Leu Ser Leu Leu Phe Leu Arg Ser Gly Ser Arg Glu Leu Leu

Gly Gln Ile Pro Ser Cys Leu Ala Thr Leu Leu Pro Ser Asp Arg Lys Asp Ser Tyr Phe His Asn Arg Ser Gly Gln Ala Arg His Ser Cys Ser Arg Leu Trp Ser Gln Tyr Cys Gly Thr Pro Arg Gln Ala Asp Gln Leu Ser Pro Gly Val <210> 3524 <211> 477 <212> PRT <213> Homo sapiens <400> 3524 Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly Val Glu Cys Gln Gly Leu Leu Glu Glu Ser Gly Gly Asp Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe Gly Ile Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Ala Leu Glu Trp Val Ala Ala Ile Trp His Asn Gly Ser Asn Glu Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Ser

Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Gly Asp Asp Thr Ala Val

			100					105					110		
Tyr	Tyr	Cys	Ala	Arg	Asp	Pro	Lys	Phe	Gly	Tyr	Cys	Ser	Ser	Thr	Ser
		115					120					125			
Cys	Leu	Thr	Asn	Tyr	Phe	Asp	Ser	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr
	130					135					140				
Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro
145					150					155					160
Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val
				165					170					175	
Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala
			180					185					190		
Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly
		195					200					205			
Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly
	210					215					220				
Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys
225					230					235					240
Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys
				245					250					255	
Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu
			260					265					270		
Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
		275					280					285			
Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys
	290					295					300				
Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys
305					310					315				٠	320
Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu
				325					330					335	

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys 340 345 350 Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys 360 365 355 Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser 375 380 370 Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys 390 395 400 385 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln 405 410 415 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly 420 425 430 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln 435 440 445 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn 450 455 460 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys 470 475 465

<210> 3525

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3525

Met Asn Pro Trp Thr Lys Glu Val Glu Tyr Ile Val Ser Thr Asn Thr

1 5 10 15

Val Val Leu Ala Asn Val Leu Glu Gly Gly Asp Pro Thr Phe Pro Gln

Leu Thr Ala Ser Pro His Ser Met Asp Ser Met Leu Pro Ser Gly Glu Gly Gly Pro Lys Arg Thr His Pro Thr Val Pro Gly Ile Pro Gly Gly Thr Arg Ala Gly Ala Gly Lys Ile Gly Arg Met Ile Ala Glu Glu Ile Met Glu Ile His Arg Gln Val Thr Pro Ser Ser Ser Ser Val Lys Pro Val Val Leu Asn Pro Gly Lys Phe Ile Pro Pro Gly Asn Ile Leu Gln Cys Gln Glu Thr Phe Leu Val Phe Thr Thr Gly Trp Glu Val Ala Thr

<210> 3526

<211> 421

<212> PRT

<213> Homo sapiens

<400> 3526

Met Arg Thr Gln Arg Lys Gly Asp Gly Gln Thr Gly Ser Ser Leu Pro

Val Glu Ala Ser Met Val Thr Pro Ser Pro Gly Trp Ser Val His Thr

Gly Asp Leu Asp Gly His Pro Leu Pro Arg Met Val Ser Ala His Arg

Arg Ser Arg Trp Ser Pro Pro Pro Gln Asp Gly Gln Cys Thr Pro Glu

Ile	Ser	Met	Val	Thr	Pro	Ser	Pro	Gly	Trp	Ser	Val	His	Thr	Gly	Asp
65					70					75					80
Leu	Asp	Gly	His	Pro	Leu	Pro	Arg	Met	Val	Ser	Ala	His	Arg	Arg	Ser
				85					90					95	
Arg	Trp	Ser	Pro	Pro	Pro	Gln	Asp	Ala	Gln	Cys	Thr	Pro	Glu	Ile	Ser
			100					105					110		
Met	Val	Thr	Pro	Ser	Pro	Gly	Cys	Ser	Val	His	Thr	Gly	Asp	Leu	Asp
		115					120					125			
Gly	His	Pro	Leu	Pro	Arg	Met	Leu	Ser	Ala	His	Arg	Arg	Ser	Arg	Trp
	130					135					140			•	
Ser	Pro	Pro	Pro	Gln	Asp	Ala	Gln	Cys	Thr	Pro	Glu	Ile	Ser	Met	Val
145					150					155					160
Thr	Pro	Ser	Pro	Gly	Trp	Ser	Val	His	Thr	Gly	Asp	Leu	Asp	Gly	His
				165					170					175	
Pro	Leu	Pro	Arg	Met	Val	Ser	Ala	His	Arg	Arg	Ser	Arg	Trp	Ser	Pro
			180					185					190		
Pro	Pro	Val	Pro	Val	Val	Arg	Val	Gly	Glu	Glu	Val	Gln	Glu	Pro	Gln
		195					200					205			
Ser	Ser	Cys	Ser	Arg	Ser	Pro	Gly	Ser	Gln	Arg	Leu	Gly	Pro	Ser	Gln
	210					215					220				
Arg	Pro	Leu	Gly	His	Glu	Glu	Gly	Gln	Gln	Gln	Pro	Glu	Leu	Arg	Met
225					230					235					240
Ala	Ser	Arg	Lys	Gly	Pro	Cys	Gln	Pro	Leu	Ser	Gln	Thr	Trp	Ser	Val
				245					250					255	
Gly	Ile	Arg	Trp	Gly	Pro	Ser	Trp	Met	Pro	Leu	Gly	Gly	Trp	Trp	Ala
			260					265					270		
Gln	Pro	Cys	Ile	Trp	Thr	Leu	Lys	Ala	Lys	Glu	Thr	Pro	Ala	Ser	Gln
		275					280					285			
Thr	Thr	Ser	Ala	He	Leu	Pro	Leu	Leu	Glv	Val	Ala	Glv	Val	Glu	Glv

Ser Ala Arg Val His Gly Pro Phe Thr Thr Ser Asp Leu Ser Gln Ile Gln Gln His Leu Gly Ser Ser Ser Glu Asn Pro Ser His Tyr Arg Lys Glu Phe Leu His Ile Thr Gln Ser Phe Asn Leu Thr Trp His Asp Ile Tyr Ile Ile Leu Ile Ser Thr Leu Thr Pro Asp Glu Lys Gly Ala Pro Gly Val Gln Leu Lys Pro Thr Gln Met Asn Ser Ile Ile Lys Pro Leu Tyr Lys Ile Gln Trp Pro Met Met His Phe Pro Thr Glu Thr His Thr Arg Phe Thr Ile Arg Glu Thr Met Ala Pro Val Trp Thr Gly Gly Ala Gly Ala Ser Ser Ser <210> 3527

<211> 589

<212> PRT

<213> Homo sapiens

<400> 3527

Met Pro Phe Lys Ala Phe Asp Thr Phe Lys Glu Lys Ile Leu Lys Pro

1 5 10 15

Gly Lys Glu Gly Val Lys Asn Ala Val Gly Asp Ser Leu Gly Ile Leu

20 25 30

Gln	Arg	Lys	Ile	Asp	Gly	Thr	Thr	Glu	Glu	Glu	Asp	Asn	Ile	Glu	Leu
		35					40					45			
Asn	Glu	Glu	Gly	Arg	Pro	Val	Gln	Thr	Ser	Arg	Pro	Ser	Pro	Pro	Leu
	50					55					60				
Cys	Asp	Cys	His	Cys	Cys	Gly	Leu	Pro	Lys	Arg	Tyr	Ile	Ile	Ala	Ile
65					70					75					80
Met	Ser	Gly	Leu	Gly	Phe	Cys	Ile	Ser	Phe	Gly	Ile	Arg	Cys	Asn	Leu
				85					90					95	
Gly	Val	Ala	Ile	Val	Glu	Met	Val	Asn	Asn	Ser	Thr	Val	Tyr	Val	Asp
			100					105				•	110		
Gly	Lys	Pro	Glu	Ile	Gln	Thr	Ala	Gln	Phe	Asn	Trp	Asp	Pro	Glu	Thr
		115					120					125			
Val	Gly	Leu	Ile	His	Gly	Ser	Phe	Phe	Trp	Gly	Tyr	Ile	Met	Thr	Gln
	130					135					140				
Ile	Pro	Gly	Gly	Phe	Ile	Ser	Asn	Lys	Phe	Ala	Ala	Asn	Arg	Val	Phe
145					150					155					160
Gly	Ala	Ala	Ile	Phe	Leu	Thr	Ser	Thr	Leu	Asn	Met	Phe	Ile	Pro	Ser
				165					170					175	
Ala	Ala	Arg	Val	His	Tyr	Gly	Cys	Val	Met	Cys	Val	Arg	Ile	Leu	Gln
			180					185					190		
Gly	Leu	Val	Glu	Gly	Val	Thr	Tyr	Pro	Ala	Cys	His	Gly	Met	Trp	Ser
		195					200					205			
Lys	Trp	Ala	Pro	Pro	Leu	Glu	Arg	Ser	Arg	Leu	Ala	Thr	Thr	Ser	Phe
	210					215					220				
Cys	Gly	Ser	Tyr	Ala	Gly	Ala	Val	Val	Ala	Met	Pro	Leu	Ala	Gly	Val
225					230					235					240
Leu	Val	Gln	Tyr	Ile	Gly	Trp	Ser	Ser	Val	Phe	Tyr	Ile	Tyr	Gly	Met
				245					250					255	
Phe	Glv	Ile	Ile	Trp	Tyr	Met	Phe	Trp	Leu	Leu	Gln	Ala	Tyr	Glu	Cys

			260					265					270		
Pro	Ala	Ala	His	Pro	Thr	Ile	Ser	Asn	Glu	Glu	Lys	Thr	Tyr	Ile	Glu
		275					280					285			
Thr	Ser	Ile	Gly	Glu	Gly	Ala	Asn	Val	Val	Ser	Leu	Ser	Lys	Phe	Ser
	290					295					300				
Thr	Pro	Trp	Lys	Arg	Phe	Phe	Thr	Ser	Leu	Pro	Val	Tyr	Ala	Ile	Ile
305					310					315					320
Val	Ala	Asn	Phe	Cys	Arg	Ser	Trp	Thr	Phe	Tyr	Leu	Leu	Leu	Ile	Ser
				325					330					335	
Gln	Pro	Ala	Tyr	Phe	Glu	Glu	Val	Phe	Gly	Phe	Ala	Ile	Ser	Lys	Val
			340					345					350		
Gly	Leu	Leu	Ser	Ala	Val	Pro	His	Met	Val	Met	Thr	Ile	Val	Val	Pro
		355					360					365			
Ile	Gly	Gly	Gln	Leu	Ala	Asp	Tyr	Leu	Arg	Ser	Arg	Gln	Ile	Leu	Thr
	370					375					380				
Thr	Thr	Ala	Val	Arg	Lys	Ile	Met	Asn	Cys	Gly	Gly	Phe	Gly	Met	Glu
385					390					395					400
Ala	Thr	Leu	Leu	Leu	Val	Val	Gly	Phe	Ser	His	Thr	Lys	Gly	Val	Ala
				405					410					415	
Ile	Ser	Phe	Leu	Val	Leu	Ala	Val	Gly	Phe	Ser	Gly	Phe	Ala	Ile	Ser
			420					425					430		
Gly	Phe	Asn	Val	Asn	His	Leu	Asp	Ile	Ala	Pro	Arg	Tyr	Ala	Ser	Ile
		435					440					445			
Leu	Met	Gly	Ile	Ser	Asn	Gly	Val	Gly	Thr	Leu	Ser	Gly	Met	Val	Cys
	450					455					460				
Pro	Leu	Ile	Val	Gly	Ala	Met	Thr	Arg	His	Lys	Thr	Arg	Glu	Glu	Trp
465					470					475					480
Gln	Asn	Val	Phe	Leu	Ile	Ala	Ala	Leu	Val	His	Tyr	Ser	Gly	Val	Ile
				485					490					495	

Phe Tyr Gly Val Phe Ala Ser Gly Glu Lys Gln Glu Trp Ala Asp Pro Glu Asn Leu Ser Glu Glu Lys Cys Gly Ile Ile Asp Gln Asp Glu Leu Ala Glu Glu Ile Glu Leu Asn His Glu Ser Phe Ala Ser Pro Lys Lys Lys Met Ser Tyr Gly Ala Thr Ser Gln Asn Cys Glu Val Gln Lys Lys Glu Trp Lys Gly Gln Arg Gly Ala Thr Leu Asp Glu Glu Glu Leu Thr Ser Tyr Gln Asn Glu Glu Arg Asn Phe Ser Thr Ile Ser

<210> 3528

<211> 893

<212> PRT

<213> Homo sapiens

<400> 3528

Met Lys Thr Asp Gly Ala Thr Val Lys Ala Ala Gly Leu Ser Pro Leu Val Ser Gly Thr Thr Val Gln Thr Gly Pro Leu Pro Thr Leu Val Ser Gly Gly Thr Ile Leu Ala Thr Val Pro Leu Val Val Asp Ala Glu Lys Leu Pro Ile Asn Arg Leu Ala Ala Gly Ser Lys Ala Pro Ala Ser Ala

Gln Ser Arg Gly Glu Lys Arg Thr Ala His Asn Ala Ile Glu Lys Arg

65					70					75					80
Tyr	Arg	Ser	Ser	Ile	Asn	Asp	Lys	Ile	Ϊle	Glu	Leu	Lys	Asp	Leu	Val
				85					90					95	
Val	Gly	Thr	Glu	Ala	Lys	Leu	Asn	Lys	Ser	Ala	Val	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Asp	Tyr	Ile	Arg	Phe	Leu	Gln	His	Ser	Asn	Gln	Lys	Leu	Lys	Gln
		115					120					125			
Glu	Asn	Leu	Ser	Leu	Arg	Thr	Ala	Val	His	Lys	Ser	Lys	Ser	Leu	Lys
	130					135					140				
Asp	Leu	Val	Ser	Ala	Cys	Gly	Ser	Gly	Gly	Asn	Thr	Asp	Val	Leu	Met
145					150					155					160
Glu	Gly	Val	Lys	Thr	Glu	Val	Glu	Asp	Thr	Leu	Thr	Pro	Pro	Pro	Ser
				165					170					175	
Asp	Ala	Gly	Ser	Pro	Phe	Gln	Ser	Ser	Pro	Leu	Ser	Leu	Gly	Ser	Arg
			180					185					190		
Gly	Ser	Gly	Ser	Gly	Gly	Ser	Gly	Ser	Asp	Ser	Glu	Pro	Asp	Ser	Pro
		195					200					205			
Val	Phe	Glu	Asp	Ser	Lys	Ala	Lys	Pro	Glu	Gln	Arg	Pro	Ser	Leu	His
	210					215					220				
Ser	Arg	Gly	Met	Leu	Asp	Arg	Ser	Arg	Leu	Ala	Leu	Cys	Thr	Leu	Val
225					230					235					240
Phe	Leu	Cys	Leu	Ser	Cys	Asn	Pro	Leu	Ala	Ser	Leu	Leu	Gly	Ala	Arg
				245					250					255	
Gly	Leu	Pro	Ser	Pro	Ser	Asp	Thr	Thr	Ser	Val	Tyr	His	Ser	Pro	Gly
			260					265					270		
Arg	Asn	Val	Leu	Gly	Thr	Glu	Ser	Arg	Asp	Gly	Pro	Gly	Trp	Ala	Gln
		275					280					285			
Trp	Leu	Leu	Pro	Pro	Val	Val	Trp	Leu	Leu	Asn	Gly	Leu	Leu	Val	Leu
	200					205					300				

V	al	Ser	Leu	Val	Leu	Leu	Phe	Val	Tyr	Gly	Glu	Pro	Val	Thr	Arg	Pro
3	05					310					315					320
F	lis	Ser	Gly	Pro	Ala	Val	Tyr	Phe	Trp	Arg	His	Arg	Lys	Gln	Ala	Asp
					325					330					335	
I	eu	Asp	Leu	Ala	Arg	Gly	Asp	Phe	Ala	Gln	Ala	Ala	Gln	Gln	Leu	Trp
				340					345					350		
I	æu	Ala	Leu	Arg	Ala	Leu	Gly	Arg	Pro	Leu	Pro	Thr	Ser	His	Leu	Asp
			355					360					365			
L	eu	Ala	Cys	Ser	Leu	Leu	Trp	Asn	Leu	Ile	Arg	His	Leu	Leu	Gln	Arg
		370					375					380				
I	eu	Trp	Val	Gly	Arg	Trp	Leu	Ala	Gly	Arg	Ala	Gly	Gly	Leu	Gln	Gln
3	885					390					395					400
A	lsp	Cys	Ala	Leu	Arg	Val	Asp	Ala	Ser	Ala	Ser	Ala	Arg	Asp	Ala	Ala
					405					410					415	
Ι	æu	Val	Tyr	His	Lys	Leu	His	Gln	Leu	His	Thr	Met	Gly	Lys	His	Thr
				420					425					430		
(Sly	Gly	His	Leu	Thr	Ala	Thr	Asn	Leu	Ala	Leu	Ser	Ala	Leu	Asn	Leu
			435					440					445			
A	lla	Glu	Cys	Ala	Gly	Asp	Ala	Val	Ser	Val	Ala	Thr	Leu	Ala	Glu	Ile
		450					455					460				
]	yr	Val	Ala	Ala	Ala	Leu	Arg	Val	Lys	Thr	Ser	Leu	Pro	Arg	Ala	Leu
4	165					470					475					480
ŀ	lis	Phe	Leu	Thr	Arg	Phe	Phe	Leu	Ser	Ser	Ala	Arg	Gln	Ala	Cys	Leu
					485			•		490					495	
A	lla	Gln	Ser	Gly	Ser	Val	Pro	Pro	Ala	Met	Gln	Trp	Leu	Cys	His	Pro
				500					505					510		
7	/al	Gly	His	Arg	Phe	Phe	Val	Asp	Gly	Asp	Trp	Ser	Val	Leu	Ser	Thr
			515					520					525			
Ţ	oro	Trn	Glu	Ser	Leu	Tvr	Ser	Leu	Ala	Glv	Asn	Pro	Val	Asp	Pro	Leu

	530					535					540				
Ala	Gln	Val	Thr	Gln	Leu	Phe	Arg	Glu	His	Leu	Leu	Glu	Arg	Ala	Leu
545					550					555					560
Asn	Cys	Val	Thr	Gln	Pro	Asn	Pro	Ser	Pro	Gly	Ser	Ala	Asp	Gly	Asp
				565					570					575	
Lys	Glu	Phe	Ser	Asp	Ala	Leu	Gly	Tyr	Leu	Gln	Leu	Leu	Asn	Ser	Cys
			580					585					590		
Ser	Asp	Ala	Ala	Gly	Ala	Pro	Ala	Tyr	Ser	Phe	Ser	Ile	Ser	Ser	Ser
		595					600					605			
Met	Ala	Thr	Thr	Thr	Gly	Val	Asp	Pro	Val	Ala	Lys	Trp	Trp	Ala	Ser
	610					615					620				
Leu	Thr	Ala	Val	Val	Ile	His	Trp	Leu	Arg	Arg	Asp	Glu	Glu	Ala	Ala
625					630					635					640
Glu	Arg	Leu	Cys	Pro	Leu	Val	Glu	His	Leu	Pro	Arg	Val	Leu	Gln	Glu
				645					650					655	
Ser	Glu	Arg	Pro	Leu	Pro	Arg	Ala	Ala	Leu	His	Ser	Phe	Lys	Ala	Ala
			660					665					670		
Arg	Ala	Leu	Leu	Gly	Cys	Ala	Lys	Ala	Glu	Ser	Gly	Pro	Ala	Ser	Leu
		675					680					685			
Thr	Ile	Cys	Glu	Glu	Ala	Ser	Gly	Tyr	Leu	Gln	Asp	Ser	Leu	Ala	Thr
	690					695					700				
Thr	Pro	Ala	Ser	Ser	Ser	Ile	Asp	Lys	Ala		Gln	Leu	Phe	Leu	
705					710					715			•		720
Asp	Leu	Leu	Leu		Val	Arg	Thr	Ser		Trp	Arg	Gln	Gln		Pro
				725				٠	730				_	735	
Pro	Ala	Pro	Ala	Pro	Ala	Ala	Gln		Thr	Ser	Ser	Arg		Gln	Ala
			740					745			_		750	_	
Ser	Ala		Glu	Leu	Arg	Gly		Gln	Arg	Asp	Leu		Ser	Leu	Arg
		755					760					765			

Arg Leu Ala Gln Ser Phe Arg Pro Ala Met Arg Arg Val Phe Leu His 770 780 775 Glu Ala Thr Ala Arg Leu Met Ala Gly Ala Ser Pro Thr Arg Thr His 795 790 800 785 Gln Leu Leu Asp Arg Ser Leu Arg Arg Arg Ala Gly Pro Gly Gly Lys 805 810 815 Gly Gly Ala Val Ala Glu Leu Glu Pro Arg Pro Thr Arg Arg Glu His 825 830 820 Ala Glu Ala Leu Leu Ala Ser Cys Tyr Leu Pro Pro Gly Phe Leu 835 840 845 Ser Ala Pro Gly Gln Arg Val Gly Met Leu Ala Glu Ala Ala Arg Thr 850 855 860 Leu Glu Lys Leu Gly Asp Arg Arg Leu Leu His Asp Cys Gln Gln Met 865 870 875 880 Leu Met Arg Leu Gly Gly Gly Thr Thr Val Thr Ser Ser 885 890

<210> 3529

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3529

Met Pro Leu Gly Arg Gln Ser His Arg His His Arg Thr His Gly Gln

1 5 10 15

Lys His Arg Arg Arg Gly Arg Gly Lys Gly Ala Ser Gln Gly Glu Glu

20 25 30

Gly Leu Glu Ala Leu Ala His Asp Thr Pro Ser Gln Arg Val Gln Phe

		35					40					45			
Ile	Leu	Gly	Thr	Glu	Glu	Asp	Glu	Glu	His	Val	Pro	His	Glu	Leu	Phe
	50					55					60				
Thr	Glu	Leu	Asp	Glu	Ile	Cys	Met	Lys	Glu	Gly	Glu	Asp	Ala	Glu	Trp
65					70					75					80
Lys	Glu	Thr	Ala	Arg	Trp	Leu	Lys	Phe	Glu	Glu	Asp	Val	Glu	Asp	Gly
				85					90					95	
Gly	Glu	Arg	Trp	Ser	Lys	Pro	Tyr	Val	Ala	Thr	Leu	Ser	Leu	His	Ser
			100					105					110		
Leu	Phe	Glu	Leu	Arg	Ser	Cys	Leu	Ile	Asn	Gly	Thr	Val	Leu	Leu	Asp
		115					120					125			
Met	His	Ala	Asn	Ser	Ile	Glu	Glu	Ile	Ser	Asp	Leu	Ile	Leu	Asp	Gln
	130					135					140				
Gln	Glu	Leu	Ser	Ser	Asp	Leu	Asn	Asp	Ser	Met	Gly	Val	Lys	Val	Arg
145					150					155					160
Glu	Ala	Leu	Leu	Lys	Lys	His	His	His	Gln	Asn	Glu	Lys	Lys	Arg	Asn
				165					170					175	
Asn	Leu	Ile	Pro	Ile	Val	Arg	Ser	Phe	Ala	Glu	Val	Gly	Lys	Lys	Gln
			180					185					190		
Ser	Asp	Pro	His	Leu	Met	Asp	Lys	His	Gly	Gln	Thr	Val	Ser	Pro	Gln
		195					200					205			
Ser	Val	Pro	Thr	Thr	Asn	Leu	Glu	Val	Lys	Asn	Gly	Val	Asn	Cys	Glu
	210					215					220				
His	Ser	Pro	Val	Asp	Leu	Ser	Lys	Val	Asp	Leu	His	Phe	Met	Lys	Lys
225					230					235					240
Ile	Pro	Thr	Gly	Ala	Glu	Ala	Ser	Asn	Val	Leu	Val	Gly	Glu	Val	Asp
				245					250					255	
Ile	Leu	Asp	Arg	Pro	Ile	Val	Ala	Phe	Val	Arg	Leu	Ser	Pro	Ala	Val
			260					265					270		

Leu Leu Ser Gly Leu Thr Glu Val Pro Ile Pro Thr Arg Phe Leu Phe
275

11e Leu Leu Gly Pro Val Gly Lys Gly Gln Gln Tyr His Glu Ile Gly
290

Arg Ser Met Ala Thr Ile Met Thr Asp Glu Val Cys Ala Thr Phe Ala
305

Ser Val Phe His Leu Ile Asn Ile Tyr

<210> 3530

<211> 130

<212> PRT

<213> Homo sapiens

325

<400> 3530

Met Asp Ala Lys Arg Arg Pro Ala Trp Pro Pro Glu Gln Gln Leu Thr
1 5 10 15

Ala Arg Leu Met Leu Asp Gly Thr Pro Gly Arg Val Asp Met Arg Pro
20 25 30

Leu Leu Ala Arg Asp Ala Val Arg Arg Pro Thr Trp Leu Pro Glu Gln
35 40 45

Gln Leu Thr Ala Arg Leu Thr Val Gly Gln Gly Phe Val Ala Trp Val
50 55 60

Phe Ser Ser Leu Pro Gly Ala Ala Arg Ser Ser Cys Ala Asp Trp Trp 65 70 75 80

Arg Trp Glu Gly Leu Leu Gly Leu Met Gly Thr Pro Ala Ser Leu Ser 85 90 95

Gly Val Gln Gln Pro Cys Arg Thr Trp Pro Pro Val Leu Ser Leu Gly

. 100 105 110

Ala Leu Ala Gly Ala Ala Leu Ser Asn Asp Ala Gly Pro Glu Gln Leu
115 120 125

Pro Thr

130

<210> 3531

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3531

Met Cys Tyr Ile His Glu Ile Ile Thr Thr Ile Met Ile Met Cys Leu

1 5 10 15

Glu Phe Ser Val Phe Ile Tyr Phe Tyr Phe Phe Glu Val Glu Ser Cys
20 25 30

Ser Val Pro Arg Leu Glu Cys Ser Gly Ala Ile Leu Ala His Cys Gly
35 40 45

Leu Arg Leu Pro Ser Leu Ser Asp Ser Pro Ala Ser Ala Ser Arg Val
50 55 60

Asp Arg Ile Ala Gly Val His His His Thr Trp Ile Ile Phe Val Phe 65 70 75 80

Leu Val Gly Thr Gly Phe Arg His Val Gly Gln Ala Gly Leu Glu Leu

85 90 95

Leu Thr Ser Ser Asp Pro Pro Ala Leu Ala Pro Gln Gly Ala Gly Ile
100 105 110

Thr Gly Met Asn His Cys Ala Trp Pro Asn Tyr Gln Tyr Leu Asn Leu 115 120 125 Asn Lys Met 130

<210> 3532

<211> 729

<212> PRT

<213> Homo sapiens

<400> 3532

Met Ser Ala Cys Ala Gly Thr Phe His Gly Ala Lys Val Lys Gly Gly

1 5 10 15

Cys Gly Gln Arg Gly Thr Tyr His Arg Ser His Ser Gly Gln Thr Cys

20 25 30

Ala Val Val Met Cys Lys Gln Leu Tyr Trp Asn Trp Ile Ser Thr

35 40 45

Phe Thr Ser Gly Ile Arg Leu Glu Glu Gln Arg Ala Ala Asp Gly Lys

50 55 60

Thr Leu Lys Gln Gln Thr Val Pro Gln Gln Lys Val Gly Val Thr Gly

65 70 75 80

Pro Pro Asp Pro Gln Val Arg Cys Pro Ser Val Ile Glu Phe Gly Lys

85 90 95

Tyr Glu Ile His Thr Trp Tyr Ser Ser Pro Tyr Pro Gln Glu Tyr Ser

100 105 110

Arg Leu Pro Lys Leu Tyr Leu Cys Glu Phe Cys Leu Lys Tyr Met Lys

115 120 125

Ser Arg Thr Ile Leu Gln Gln His Met Lys Lys Cys Gly Trp Phe His

130 135 140

Pro Pro Ala Asn Glu Ile Tyr Arg Lys Asn Asn Ile Ser Val Phe Glu

145					150					155					160
Val	Asp	Gly	Asn	Val	Ser	Thr	Ile	Tyr	Cys	Gln	Asn	Leu	Cys	Leu	Leu
				165					170					175	
Ala	Lys	Leu	Phe	Leu	Asp	His	Lys	Thr	Leu	Tyr	Tyr	Asp	Val	Glu	Pro
			180					185					190		
Phe	Leu	Phe	Tyr	Val	Leu	Thr	Gln	Asn	Asp	Val	Lys	Gly	Cys	His	Leu
		195					200					205			
Val	Gly	Tyr	Phe	Ser	Lys	Glu	Lys	His	Cys	Gln	Gln	Lys	Tyr	Asn	Val
	210					215					220				
Ser	Cys	Ile	Met	Ile	Leu	Pro	Gln	Tyr	Gln	Arg	Lys	Gly	Tyr	Gly	Arg
225					230					235					240
Phe	Leu	Ile	Asp	Phe	Ser	Tyr	Leu	Leu	Ser	Lys	Arg	Glu	Gly	Gln	Ala
				245					250					255	
Gly	Ser	Pro	Glu	Lys	Pro	Leu	Ser	Asp	Leu	Gly	Arg	Leu	Ser	Tyr	Met
			260					265					270		
Ala	Tyr	Trp	Lys	Ser	Val	Ile	Leu	Glu	Cys	Leu	Tyr	His	Gln	Asn	Asp
		275					280					285			
Lys	Gln	Ile	Ser	Ile	Lys	Lys	Leu	Ser	Lys	Leu	Thr	Gly	Ile	Cys	Pro
	290					295					300				
Gln	Asp	Ile	Thr	Ser	Thr	Leu	His	His	Leu	Arg	Met	Leu	Asp	Phe	Arg
305					310					315					320
Ser	Asp	Gln	Phe	Val	Ile	Ile	Arg	Arg	Glu	Lys	Leu	Ile	Gln	Asp	His
				325					330					335	
Met	Ala	Lys	Leu	Gln	Leu	Asn	Leu	Arg	Pro	Val	Asp	Val	Asp	Pro	Glu
			340					345					350		
Cys	Leu	Arg	Trp	Thr	Pro	Val	Ile	Val	Ser	Asn	Ser	Val	Val	Ser	Glu
		355					360					365			
Glu	Glu	Glu	Glu	Glu	Ala	Glu	Glu	Gly	Glu	Asn	Glu	Glu	Pro	Gln	Cys
	370					375					380				

Gln	Glu	Arg	Glu	Leu	Glu	Ile	Ser	Val	Gly	Lys	Ser	Val	Ser	His	Glu
385					390					395					400
Asn	Lys	Glu	Gln	Asp	Ser	Tyr	Ser	Val	Glu	Ser	Glu	Lys	Lys	Pro	Glu
				405					410					415	
Val	Met	Ala	Pro	Val	Ser	Ser	Thr	Arg	Leu	Ser	Lys	Gln	Val	Leu	Pro
			420					425					430		
His	Asp	Ser	Leu	Pro	Ala	Asn	Ser	Gln	Pro	Ser	Arg	Arg	Gly	Arg	Trp
		435					440					445			
Gly	Arg	Lys	Asn	Arg	Lys	Thr	Gln	Glu	Arg	Phe	Gly	Asp	Lys	Asp	Ser
	450					455					460				
Lys	Leu	Leu	Leu	Glu	Glu	Thr	Ser	Ser	Ala	Pro	Gln	Glu	Gln	Tyr	Gly
465					470					475					480
Glu	Cys	Gly	Glu	Lys	Ser	Glu	Ala	Thr	Gln	Glu	Gln	Tyr	Thr	Glu	Ser
				485					490					495	
Glu	Glu	Gln	Leu	Val	Ala	Ser	Glu	Glu	Gln	Pro	Ser	Gln	Asp	Gly	Lys
			500					505					510		
Pro	Asp	Leu	Pro	Lys	Arg	Arg	Leu	Ser	Glu	Gly	Val	Glu	Pro	Trp	Arg
		515					520					525			
Gly	Gln	Leu	Lys	Lys	Ser	Pro	Glu	Ala	Leu	Lys	Cys	Arg	Leu	Thr	Glu
	530					535					540				
Gly	Ser	Glu	Arg	Leu	Pro	Arg	Arg	Tyr	Ser	Glu	Gly	Asp	Arg	Ala	Val
545					550					555					560
Leu	Arg	Gly	Phe	Ser	Glu	Ser	Ser	Glu	Glu	Glu	Glu	Glu	Pro	Glu	Ser
•				565					570					575	
Pro	Arg	Ser	Ser	Ser	Pro	Pro	Ile	Leu	Thr	Lys	Pro	Thr	Leu	Lys	Arg
			580					585					590		
Lys	Lys	Pro	Phe	Leu	His	Arg	Arg	Arg	Arg	Val	Arg	Lys	Arg	Lys	His
		595					600					605			
His	Asn	Ser	Ser	Val	Val	Thr	Glu	Thr	Ile	Ser	Glu	Thr	Thr	Glu	Val

615 620 610 Leu Asp Glu Pro Phe Glu Asp Ser Asp Ser Glu Arg Pro Met Pro Arg 635 640 630 625 Leu Glu Pro Thr Phe Glu Ile Asp Glu Glu Glu Glu Glu Glu Asp Glu 645 650 655 Asn Glu Leu Phe Pro Arg Glu Tyr Phe Arg Arg Leu Ser Ser Gln Asp 670 660 665 Val Leu Arg Cys Gln Ser Ser Ser Lys Arg Lys Ser Lys Asp Glu Glu 675 680 685 Glu Asp Glu Glu Ser Asp Asp Ala Asp Asp Thr Pro Ile Leu Lys Pro 690 695 700 Val Ser Leu Leu Arg Lys Arg Asp Val Lys Asn Ser Pro Leu Glu Pro 720 705 710 715 Asp Thr Ser Thr Pro Leu Lys Lys Lys 725

<210> 3533

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3533

Met Leu Met Leu Tyr Pro Lys Thr Leu Leu Asn Leu Phe Ile Ser Ser

1 5 10 15

Lys Asn Val Leu Val Asp Ser Leu Gly Phe Phe Lys Cys Lys Ile Met
20 25 30

Leu Ser Ala His Lys Asp Asn Leu Thr Ser Ser Phe Pro Ile Trp Thr
35 40 45

Arg Leu Ile Ser Phe Ser Cys Leu Ile Ala Leu Ala Trp Asn Ser Ser Thr Met Leu Asp Arg Ser Asp Glu Ser Glu His Ser Tyr Leu Val Pro Asp Leu Ser Gly Lys Ser Phe Ser Cys Ser Ala Leu Ser Met Ile Leu Ala Val Gly Leu Leu Cys Met Ala Phe Ile Met Leu Met Tyr Val Pro Ser Asn Pro Val Cys <210> 3534 <211> 172 <212> PRT <213> Homo sapiens <400> 3534 Met Gly Asn Asn Thr Val Leu Asp Val Leu Arg Arg Glu Gly Tyr Glu Val Glu His Ala Pro Ala Gly Arg Pro Ile His Lys Gly Lys Ser Lys Lys Thr Ser Thr Arg Pro Thr Leu Ser Thr Ile Phe Ala Pro Lys Val Pro Thr Leu Glu Val Pro Ala Pro Glu Ala Val Ser Ser Gly His Ser

Thr Leu Pro Pro Leu Val Ser Arg Pro Gly Ser Ala Asp Thr Pro Ser

Glu Ala Glu Gln Arg Phe Arg Lys Lys Arg Arg Arg Ser Gln Arg Arg

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Pro Arg Leu Arg Gln Phe Ser Asp Leu Trp Val Arg Leu Glu Glu Ser Asp Ile Val Pro Gln Leu Gln Val Pro Val Leu Asp Arg His Ile Ser Thr Glu Leu Arg Leu Pro Arg Arg Gly His Ser His His Ser Gln Met Val Ala Ser Ser Ala Cys Leu Ser Leu Trp Thr Pro Val Phe Trp Val Leu Val Leu Ala Phe Gln Thr Glu Thr Pro Leu Leu

<210> 3535

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3535

Met Gly Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Asn Asp Pro Ala Ser Gln Ser Ala Gly Ile Ser Gly Met Ser His His Ala Gln Pro Asn Arg Ile Phe Leu Thr Trp Gly Leu Trp Thr Leu Arg Asn Ser Ile Gln Arg Tyr Leu Tyr Phe Phe Phe Gly Ile Tyr Ser Phe Phe Phe Ser Leu Pro Pro Leu Ala Ala Gly Arg Val Leu Ala Leu Ile

Glu Cys Val Thr Arg Pro Glu Ala Phe Pro Pro Pro Pro Pro Pro Leu 85 90 95

Phe Ile Ser Ser Pro Gln Lys Lys Val Lys Asn Leu Cys Tyr Arg Arg
100 105 110

Trp Trp

<210> 3536

<211> 340

<212> PRT

<213> Homo sapiens

<400> 3536

Met Phe Ser Val Ser Leu Gly Gln Thr Ile Leu Cys Ile Gly Arg Asp

1 5 10 15

Lys Ser Ser Cys Glu Ser Tyr Gly Tyr Asn Val Cys Asp Tyr Gln Cys

20 25 30

Trp Glu Asn Ser Val Gly Glu Glu Leu Tyr Lys Leu Ser Ile Phe Asn
35 40 45

Phe Leu Leu Thr Val Ala Phe Ala Phe Leu Val Thr Leu Pro Arg Arg 50 55 60

Leu Leu Val Asp Arg Phe Ser Gly Arg Phe Trp Ala Trp Leu Glu Arg
65 70 75 80

Glu Glu Phe Leu Val Pro Lys Asn Val Leu Asp Ile Val Ala Gly Gln 85 90 95

Thr Val Thr Trp Met Gly Leu Phe Tyr Cys Pro Leu Leu Pro Leu Leu 100 105 110

Asn Ser Val Phe Leu Phe Leu Thr Phe Tyr Ile Lys Lys Tyr Thr Leu

		115					120					125			
Leu	Lys	Asn	Ser	Arg	Ala	Ser	Ser	Arg	Pro	Phe	Arg	Ala	Ser	Ser	Ser
	130					135					140				
Thr	Phe	Phe	Phe	Gln	Leu	Val	Leu	Leu	Leu	Gly	Leu	Leu	Leu	Ala	Ala
145					150					155					160
Val	Pro	Leu	Gly	Tyr	Val	Val	Ser	Ser	Ile	His	Ser	Ser	Trp	Asp	Cys
				165					170					175	
Gly	Leu	Phe	Thr	Asn	Tyr	Ser	Ala	Pro	Trp	Gln	Val	Val	Pro	Glu	Leu
			180					185					190		
Val	Ala	Leu	Gly	Leu	Pro	Pro	Ile	Gly	Gln	Arg	Ala	Leu	His	Tyr	Leu
		195					200					205			
Gly	Ser	His	Ala	Phe	Ser	Phe	Pro	Leu	Leu	Ile	Met	Leu	Ser	Leu	Val
	210					215					220				
Leu	Thr	Val	Cys	Val	Ser	Gln	Thr	Gln	Ala	Asn	Ala	Arg	Ala	Ile	His
225					230					235					240
Arg	Leu	Arg	Lys	Gln	Leu	Val	Trp	Gln	Val	Gln	Glu	Lys	Trp	His	Leu
				245				-	250					255	
Val	Glu	Asp	Leu	Ser	Arg	Leu	Leu	Pro	Glu	Pro	Gly	Pro	Ser	Asp	Ser
			260					265					270		
Pro	Gly	Pro	Lys	Tyr	Pro	Ala	Ser	Gln	Ala	Ser	Arg	Pro	Gln	Ser	Phe
		275					280					285			
Cys	Pro	Gly	Cys	Pro	Cys	Pro	Gly	Ser	Pro	Gly	His	Gln	Ala	Pro	Arg
	290					295					300				
Pro	Gly	Pro	Ser	Val	Val	Asp	Ala	Ala	Gly	Leu	Arg	Ser	Pro	Cys	Pro
305					310					315					320
Gly	Gln	His	Gly	Ala	Pro	Ala	Ser	Ala	Arg	Arg	Phe	Arg	Phe	Pro	Ser
				325					330					335	
Gly	Ala	Glu	Leu												
			340												

<210> 3537 <211> 172 <212> PRT <213> Homo sapiens <400> 3537 Met Ile Gly Glu Leu Glu Glu Pro Ala Val Ser Ala Ile Glu Arg Pro Ser Glu Leu Gly Leu Asp Ala Ala Ser Leu His Ser Ser Arg Glu Thr Arg Asp Thr Gln Pro Gln Arg Thr Arg Pro Tyr Glu Met Glu Ala Glu Thr Gly Glu Met Pro Pro Gln Ala Lys Asp Ala Trp Gly His Gln Glu Leu Gly Glu Val Arg Asn Arg Phe Ser Arg Glu Pro Ala Glu Gly Thr Ser Leu Pro Thr Pro Trp Cys Trp Ala Ser Gly Leu Arg Thr Gln Thr Val Asn Leu Cys Cys Leu Lys Pro Pro Ser Leu Val Leu Gly Tyr Ser Ser Pro Arg Thr Leu Ser Pro Gln Pro Pro Leu Gln Gln Ile Ser Val Ser Pro Pro His Leu Phe Ala Glu Ala Pro Ser Thr Asn Lys Cys Arg

Arg Gly Gly His Glu Val Lys Ala Leu Leu Cys

Gln Leu Phe Leu Glu Phe Cys Ile Lys Asp Lys Lys Leu Gly Ala Gln

165 170

<210> 3538

<211> 686

<212> PRT

<213> Homo sapiens

<400> 3538

Met Leu Val Glu Thr Ser Met Ile Gly Leu Met Leu Gly Thr Cys Ile

1 5 10 15

Ala Phe Tyr Val Val Ile Gly Asp Leu Gly Ser Asn Phe Phe Ala Arg

20 25 30

Leu Phe Gly Phe Gln Val Gly Gly Thr Phe Arg Met Phe Leu Leu Phe

35 40 45

Ala Val Ser Leu Cys Ile Val Leu Pro Leu Ser Leu Gln Arg Asn Met

50 55 60

Met Ala Ser Ile Gln Ser Phe Ser Ala Met Ala Leu Leu Phe Tyr Thr

65 70 75 80

Val Phe Met Phe Val Ile Val Leu Ser Ser Leu Lys His Gly Leu Phe

85 90 95

Ser Gly Gln Trp Leu Arg Arg Val Ser Tyr Val Arg Trp Glu Gly Val

100 105 110

Phe Arg Cys Ile Pro Ile Phe Gly Met Ser Phe Ala Cys Gln Ser Gln

115 120 125

Val Leu Pro Thr Tyr Asp Ser Leu Asp Glu Pro Ser Val Lys Thr Met

130 135 140

Ser Ser Ile Phe Ala Ser Ser Leu Asn Val Val Thr Thr Phe Tyr Val

145 150 155 160

Met	Val	Gly	Phe	Phe	Gly	Tyr	Val	Ser	Phe	Thr	Glu	Ala	Thr	Ala	Gly
				165					170					175	
Asn	Val	Leu	Met	His	Phe	Pro	Ser	Asn	Leu	Val	Thr	Glu	Met	Leu	Arg
			180					185					190		
Val	Gly	Phe	Met	Met	Ser	Val	Ala	Val	Gly	Phe	Pro	Met	Met	Ile	Leu
		195					200					205			
Pro	Cys	Arg	Gln	Ala	Leu	Ser	Thr	Leu	Leu	Cys	Glu	Gln	Gln	Gln	Lys
	210					215					220				
Asp	Gly	Thr	Phe	Ala	Ala	Gly	Gly	Tyr	Met	Pro	Pro	Leu	Arg	Phe	Lys
225					230					235					240
Ala	Leu	Thr	Leu	Ser	Val	Val	Phe	Gly	Thr	Met	Val	Gly	Gly	Ile	Leu
				245					250					255	
Ile	Pro	Asn	Val	Glu	Thr	Ile	Leu	Gly	Leu	Thr	Gly	Ala	Thr	Met	Gly
			260					265					270		
Ser	Leu	Ile	Cys	Phe	Ile	Cys	Pro	Ala	Leu	Ile	Tyr	Lys	Lys	Ile	His
		275					280					285			
Lys	Asn	Ala	Leu	Ser	Ser	Gln	Val	Val	Leu	Trp	Val	Gly	Leu	Gly	Val
	290					295					300				
Leu	Val	Val	Ser	Thr	Val	Thr	Thr	Leu	Ser	Val	Ser	Glu	Glu	Val	Pro
305					310					315					320
Glu	Asp	Leu	Ala	Glu	Glu	Ala	Pro	Gly	Gly	Arg	Leu	Gly	Glu	Ala	Glu
				325					330					335	
Gly	Leu	Met	Lys	Val	Glu	Ala	Ala	Arg	Leu	Ser	Ala	Gln	Asp	Pro	Val
			340					345					350		
Val	Ala	Val	Ala	Glu	Asp	Gly	Arg	Glu	Lys	Pro	Lys	Leu	Pro	Lys	Glu
		355					360					365			
Arg	Glu	Glu	Leu	Glu	Gln	Ala	Gln	Ile	Lys	Gly	Pro	Val	Asp	Val	Pro
	370					375					380				
Glv	Arg	Glu	Asp	Glv	Lvs	Glu	Ala	Pro	Glu	Glu	Ala	Gln	Leu	Asp	Arg

385					390					395					400
Pro	Gly	Gln	Gly	Ile	Ala	Val	Pro	Val	Gly	Glu	Ala	His	Arg	His	Glu
				405					410					415	
Pro	Pro	Val	Pro	His	Asp	Lys	Val	Val	Val	Asp	Glu	Gly	Gln	Asp	Arg
			420					425					430		
Glu	Val	Pro	Glu	Glu	Asn	Lys	Pro	Pro	Ser	Arg	His	Ala	Gly	Gly	Lys
		435					440					445			
Ala	Pro	Gly	Val	Gln	Gly	Gln	Met	Ala	Pro	Pro	Leu	Pro	Asp	Ser	Glu
	450					455					460				
Arg	Glu	Lys	Gln	Glu	Pro	Glu	Gln	Gly	Glu	Val	Gly	Lys	Arg	Pro	Gly
465					470					475					480
Gln	Ala	Gln	Ala	Leu	Glu	Glu	Ala	Gly	Asp	Leu	Pro	Glu	Asp	Pro	Gln
				485					490					495	
Lys	Val	Pro	Glu	Ala	Asp	Gly	Gln	Pro	Ala	Val	Gln	Pro	Ala	Lys	Glu
			500					505					510		
Asp	Leu	Gly	Pro	Gly	Asp	Arg	Gly	Leu	His	Pro	Arg	Pro	Gln	Ala	Val
		515					520					525			
Leu	Ser	Glu	Gln	Gln	Asn	Gly	Leu	Ala	Val	Gly	Gly	Gly	Glu	Lys	Ala
	530					535					540				
Lys	Gly	Gly	Pro	Pro	Pro	Gly	Asn	Ala	Ala	Gly	Asp	Thr	Gly	Gln	Pro
545					550					555					560
Ala	Glu	Asp	Ser	Asp	His	Gly	Gly	Lys	Pro	Pro	Leu	Pro	Ala	Glu	Lys
				565					570					575	
Pro	Ala	Pro	Gly	Pro	Gly	Leu	Pro	Pro	Glu	Pro	Arg	Glu	Gln	Arg	Asp
			580					585					590		
Val	Glu	Arg	Ala	Gly	Gly	Asn	Gln	Ala	Ala	Ser	Gln	Leu	Glu	Glu	Ala
		595					600					605			
Gly	Arg	Ala	Glu	Met	Leu	Asp	His	Ala	Val	Leu	Leu	Gln	Val	Ile	Lys
	610					615					620				

Glu Gln Gln Val Gln Gln Lys Arg Leu Leu Asp Gln Gln Glu Lys Leu 630 635 640 625 Leu Ala Val Ile Glu Glu Gln His Lys Glu Ile His Gln Gln Arg Gln 645 650 655 Glu Asp Glu Glu Asp Lys Pro Arg Gln Val Glu Val His Gln Glu Pro 660 665 670 Gly Ala Ala Val Pro Arg Gly Gln Glu Ala Pro Glu Gly Ser 680 675 685

<210> 3539

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3539

Met Asp Ala His Ser Ser Val Glu Leu Phe Ser Ala Gly Gln Val Ser

1 5 10 15

Ala Ser Ile Ile Ser Gln Arg Leu Thr Glu Ser Leu Ile His Gln Tyr
20 25 30

Arg Ile Pro His Asn Thr Ala Leu Asp Arg Gly Pro Thr Leu Glu Lys

35 40 45

Ser Lys Cys Arg Ser Gly Leu Met Thr Met Arg Leu Asp Gly His Ile
50 55 60

Pro Tyr Thr Pro Pro Arg Ser Cys Gln His Asn Arg Asp Leu Glu Arg 65 70 75 80

Leu Val Gly Ser Thr Ala Arg Thr Pro Ala Trp Ser Gln Leu His Glu

85 90 95

Asp Asp Ser Gly Arg Trp Ile His Ile Tyr Met Cys Arg Lys Asp Phe

100 105 110

Tyr Leu Ser Ala

115

<210> 3540

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3540

Met Cys Thr Val Ala His Thr Cys Ile Glu His Met Cys Thr Tyr Met

1 5 10 15

Arg Leu His Pro Leu Ala His Pro His Thr Cys Ala Leu Ala Pro Ile

20 25 30

Cys Thr His Val His Thr Leu Ala His Met Cys Ile Cys Arg Asn Ala

35 40 45

Pro Leu His Leu Cys Asp Thr Pro Ala His Leu His Thr Pro Ile Cys

50 55 60

Ile Gln Ala Gln Thr His Ser His Thr Phe Ala His Thr Ala Thr Asn

65 70 75 80

Leu His Lys Gln His Leu Tyr Thr Asp Thr Tyr Pro Phe Val Pro Ile

85 90 95

Gln Cys Thr Leu Thr His Leu His Thr Ala Val Leu Ala His Thr Phe

100 105 110

Ala His Thr His Leu His Thr Cys Thr His Thr Thr His Leu Ser Val

115 120 125

Gln His Thr Tyr Leu Cys Ala Tyr Met His Ile Cys Thr Cys Thr Gln

130 135 140

Gln Trp His Thr Leu Leu Tyr His Ser Pro 145 150

<210> 3541

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3541

50

Met Ala Leu Ile Ala Gly Ala Glu Pro Cys Pro Gly Pro His Gly Gln

1 5 10 15

Ser Ala Cys Arg Pro Pro Cys Ser Ser Arg Gly Arg Thr Ser Thr Ser
20 25 30

Gly Ala Thr Gln Leu Gly Gly Cys Leu Pro Ser Phe Thr Gly Gly Asp 35 40 45

His Arg Ile Ser Ala Pro Pro Ala Ala Trp Leu Ser Arg Gly Cys

55

His His Pro Leu Ala Pro Gly Gln Pro Arg Arg Thr Gly Lys Gly Leu 65 70 75 80

60

Arg Pro Leu Pro Thr Gln Ser Gln Ser Glu Leu Leu Leu Arg Ala Gly

85 90 95

Gln Gln Ala Leu Cys Pro Gly Arg Ala Cys Gly Leu Gly Val Pro Gln
100 105 110

Ser Pro Gly Ala Ser Pro Ser Glu Ile Pro Thr Gln Leu Cys Gln Ser 115 120 125

Pro Lys His Phe Met His Ile Glu Thr Glu Pro Gly Pro His Gln Gly
130 135 140

Leu Leu Gly Ser Asp Ser Trp Gln Trp Pro Gly Val Cys Thr Tyr Thr

Tyr Ala Asp Thr Cys Gln Gly Pro Pro Ser Pro Ser Thr Gly Pro Arg Cys Cys Pro Gly Leu Asp Leu Ser Gly Arg Thr Gly Ser Gly Gly Ser Gly Ala Leu Arg <210> 3542 <211> 531 <212> PRT <213> Homo sapiens <400> 3542 Met Gly Leu Pro Arg Leu Val Cys Ala Phe Leu Leu Ala Ala Cys Cys Cys Cys Pro Arg Val Ala Gly Val Pro Gly Glu Ala Glu Gln Pro Ala Pro Glu Leu Val Glu Val Glu Val Gly Ser Thr Ala Leu Leu Lys Cys Gly Leu Ser Gln Ser Gln Gly Asn Leu Ser His Val Asp Trp Phe Ser Glu Glu Arg Thr Leu Ile Phe Arg Val Arg Gln Gly Gln Gly Gln Ser Glu Pro Gly Glu Tyr Glu Gln Arg Leu Ser Leu Gln Asp Arg Gly Ala Thr Leu Ala Leu Thr Gln Val Thr Pro Gln Asp Glu Arg Ile Phe Leu

Cys	Gln	Gly	Lys	Arg	Pro	Arg	Ser	Gln	Glu	Tyr	Arg	Ile	Gln	Leu	Arg
		115					120					125			
Val	Tyr	Lys	Ala	Pro	Glu	Glu	Pro	Asn	Ile	Gln	Val	Asn	Pro	Leu	Gly
	130					135					140				
Ile	Pro	Val	Asn	Ser	Lys	Glu	Pro	Glu	Glu	Val	Ala	Thr	Cys	Val	Gly
145					150					155					160
Arg	Asn	Gly	Tyr	Pro	Ile	Pro	Gln	Val	Ile	Trp	Tyr	Lys	Asn	Gly	Arg
				165					170					175	
Pro	Leu	Lys	Glu	Glu	Lys	Asn	Arg	Val	His	Ile	Gln	Ser	Ser	Gln	Thr
			180					185					190		
Val	Glu	Ser	Ser	Gly	Leu	Tyr	Thr	Leu	Gln	Ser	Ile	Leu	Lys	Ala	Gln
		195					200					205			
Leu	Val	Lys	Glu	Asp	Lys	Asp	Ala	Gln	Phe	Tyr	Cys	Glu	Leu	Asn	Tyr
	210					215					220				
Arg	Leu	Pro	Ser	Gly	Asn	His	Met	Lys	Glu	Ser	Arg	Glu	Val	Thr	Val
225					230					235					240
Pro	Val	Phe	Tyr	Pro	Thr	Glu	Lys	Val	Trp	Leu	Glu	Val	Glu	Pro	Val
				245	•				250					255	
Gly	Met	Leu	Lys	Glu	Gly	Asp	Arg	Val	Glu	Ile	Arg	Cys	Leu	Ala	Asp
			260					265					270		
Gly	Asn	Pro	Pro	Pro	His	Phe	Ser	Ile	Ser	Lys	Gln	Asn	Pro	Ser	Thr
		275					280					285			
Arg	Glu	Ala	Glu	Glu	Glu	Thr	Thr	Asn	Asp	Asn	Gly	Val	Leu	Val	Leu
	290					295					300				
Glu	Pro	Ala	Arg	Lys	Glu	His	Ser	Gly	Arg	Tyr	Glu	Cys	Gln	Gly	Leu
305					310					315					320
Asp	Leu	Asp	Thr	Met	Ile	Ser	Leu	Leu	Ser	Glu	Pro	Gln	Glu	Leu	Leu
				325					330					335	
Val	Asn	Tvr	Val	Ser	Asp	Val	Arg	Val	Ser	Pro	Ala	Ala	Pro	Glu	Arg

Gln Glu Gly Ser Ser Leu Thr Leu Thr Cys Glu Ala Glu Ser Ser Gln Asp Leu Glu Phe Gln Trp Leu Arg Glu Glu Thr Gly Gln Val Leu Glu Arg Gly Pro Val Leu Gln Leu His Asp Leu Lys Arg Glu Ala Gly Gly Gly Tyr Arg Cys Val Ala Ser Val Pro Ser Ile Pro Gly Leu Asn Arg Thr Gln Leu Val Asn Val Ala Ile Phe Gly Pro Pro Trp Met Ala Phe Lys Glu Arg Lys Val Trp Val Lys Glu Asn Met Val Leu Asn Leu Ser Cys Glu Ala Ser Gly His Pro Arg Pro Thr Ile Ser Trp Asn Val Asn Gly Thr Ala Ser Glu Gln Asp Gln Asp Pro Gln Arg Val Leu Ser Thr Leu Asn Val Leu Val Thr Pro Glu Leu Leu Glu Thr Gly Val Glu Cys Thr Ala Ser Asn Asp Leu Gly Lys Asn Thr Ser Ile Leu Phe Leu Glu Leu Gly Glu Gly Cys Ile Pro Ala Gly Asp Gly Arg Gly Arg Pro Arg His Gly Gln

<210> 3543

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3543

Met Arg Leu Arg Gly Leu Ser Glu Gly Ile Ile Leu Ser Ala Leu Leu

1 5 10 15

Phe Val Val Phe Val Leu Leu Gly Leu Phe Pro Ile Leu Glu Val Leu

20 25 30

Asp Val Ser Leu Ser Phe Leu Thr Val Trp Gly Ser Thr Ser Leu Thr

35 40 45

Arg Asp Phe Leu His Pro Phe Pro Gly Asp Leu Thr Pro Leu Pro Thr

50 55 60

Gly Gly Phe Leu His Ser Phe Thr Leu Leu His Thr Arg Phe Ala Leu

65 70 75 80

Asn Cys Ala Ser His Ser His Thr Phe Asn Leu Gln Asp Val Pro Thr

85 90 95

Thr Lys Glu Val Leu His Cys Pro Cys Gly Phe Ser Tyr Leu Gly Leu

100 105 110

Cys Thr Glu Leu Leu Gly His His Gly Ile Cys Arg Pro Phe Pro Ser

115 120 125

Met Leu Leu Arg Val Ser Val Tyr Ser Ser Cys Trp Trp Val Ser Ile

130 135 140

Pro His Ser

145

<210> 3544

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3544 Met Leu Ala Leu Ala Lys Ile Leu Leu Ile Ser Thr Leu Phe Tyr Ser Leu Leu Ser Gly Ser His Gly Lys Glu Asn Gln Asp Ile Asn Thr Thr Gln Asn Ile Ala Glu Val Phe Lys Thr Met Glu Asn Lys Pro Ile Ser Leu Glu Ser Glu Ala Asn Leu Asn Ser Asp Lys Glu Asn Ile Thr Thr Ser Asn Leu Lys Ala Ser His Ser Pro Pro Leu Asn Leu Pro Asn Asn Ser His Gly Ile Thr Asp Phe Ser Ser Asn Ser Ser Ala Glu His Ser Leu Gly Ser Leu Lys Pro Thr Ser Thr Ile Ser Thr Ser Pro Pro Leu Ile His Ser Phe Val Ser Lys Val Pro Trp Asn Ala Pro Ile Ala Asp Glu Asp Leu Leu Pro Ile Ser Ala His Pro Asn Ala Thr Pro Ala Leu Ser Ser Glu Asn Phe Thr Trp Ser Leu Val Asn Asp Thr Val Lys Thr

Pro Asp Asn Ser Ser Ile Thr Val Ser Ile Leu Ser Ser Glu Pro Thr

Ser Pro Ser Val Thr Pro Leu Ile Val Glu Pro Ser Gly Trp Leu Thr

Thr Asn Ser Asp Ser Phe Thr Gly Phe Thr Pro Tyr Gln Glu Lys Thr

Thr Leu Gln Pro Thr Leu Lys Phe Thr Asn Asn Ser Lys Leu Phe Pro 210 220 215 Asn Thr Ser Asp Pro Gln Lys Glu Asn Arg Asn Thr Gly Ile Val Phe 225 230 235 240 Gly Ala Ile Leu Gly Ala Ile Leu Gly Val Ser Leu Leu Thr Leu Val 245 250 255 Gly Tyr Leu Leu Cys Gly Lys Arg Lys Thr Asp Ser Phe Ser His Arg 270 260 265 Arg Leu Tyr Asp Asp Arg Asn Glu Pro Val Leu Arg Leu Asp Asn Ala 280 275 285 Pro Glu Pro Tyr Asp Val Ser Phe Gly Asn Ser Ser Tyr Tyr Asn Pro 290 295 300 Thr Leu Asn Asp Ser Ala Met Pro Glu Ser Glu Glu Asn Ala Arg Asp 305 310 315 320 Gly Ile Pro Met Asp Asp Ile Pro Pro Leu Arg Thr Ser Val 325 330

<210> 3545

<211> 909

<212> PRT

<213> Homo sapiens

<400> 3545

Met Leu Ala Leu Gly Glu Thr Ser Met Phe Leu Val Arg Arg Asp Ser

1 5 10 15

Ser Ser Lys Gln Leu Val Leu Cys Val His Phe Pro Ser Leu Asn Glu
20 25 30

Ser Ser Ala Glu Val Leu Glu Tyr Thr Ile Lys Glu Glu Lys Ser Ile

		35					40					45			
Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu	Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu
	50					55					60				
Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg	Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg
65					70					75					80
Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala	Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr
				85					90	•				95	
Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe	Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro
			100					105					110		
Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu	Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly
		115					120					125			
Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg	Pro	Thr	Ala	Arg	Asp	Ala	Asn	Cys
	130					135					140				
Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val	Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val
145					150					155					160
Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys	Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln
				165					170					175	
Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ala	Arg	Pro	Leu	Pro	Pro	Thr	Ser	Asp
			180					185					190		
Ala	Thr	Ser	Pro	Thr	Ser	Arg		Ala	Pro	Arg	Arg		Pro	Pro	Pro
		195					200					205			
Pro		Val	Leu	Pro	Leu		Pro	Cys	Ser	Pro		Gln	Pro	Pro	Val
	210					215					220	_			
	Pro	Ala	Leu	Ala	Pro	Ala	Pro	Ala	Cys		Leu	Pro	Thr	Ser	
225		_		_	230			_		235	_		_	_	240
Pro	Val	Pro	Ala		His	Val	Thr	Pro		Ala	Pro	Gly	Pro		Asp
	_			245	_				250			_	_	255	_
His	Pro	Asn		Pro	Pro	Met	Met		Cys	Glu	Arg	Leu		Cys	Pro
			260					265					270		

Thr	Ala	Gly	Leu	Gly	Pro	Leu	Arg	Glu	Glu	Ala	Met	Lys	Pro	Gly	Ala
		275					280					285			
Ala	Ser	Ser	Pro	Leu	Gln	Gĺn	Val	Pro	Ala	Pro	Pro	Leu	Pro	Ala	Lys
	290					295					300				
Lys	Asn	Leu	Pro	Thr	Ala	Pro	Pro	Arg	Arg	Arg	Val	Ser	Glu	Arg	Val
305					310					315					320
Ser	Leu	Glu	Asp	Gln	Ser	Pro	Gly	Met	Ala	Ala	Glu	Gly	Asp	Gln	Leu
				325					330					335	
Ser	Leu	Pro	Pro	Gln	Gly	Thr	Ser	Asp	Gly	Pro	Glu	Asp	Thr	Pro	Arg
			340					345					350		
Glu	Ser	Thr	Glu	Gln	Gly	Gln	Asp	Thr	Glu	Val	Lys	Ala	Ser	Asp	Pro
		355					360					365			
His	Ser	Met	Pro	Glu	Leu	Pro	Arg	Thr	Ala	Lys	Gln	Pro	Pro	Val	Pro
	370					375					380				
Pro	Pro	Arg	Lys	Lys	Arg	Ile	Ser	Arg	Gln	Leu	Ala	Ser	Thr	Leu	Pro
385					390					395					400
Ala	Pro	Leu	Glu	Asn	Ala	Glu	Leu	Cys	Ser	Gln	Ala	Met	Ala	Leu	Glu
				405					410					415	
Thr	Pro	Thr	Pro	Gly	Pro	Pro	Arg	Glu	Gly	Gln	Ser	Pro	Ala	Ser	Glr
			420					425					430		
Ala	Gly	Thr	Gln	His	Pro	Pro	Ala	Gln	Ala	Thr	Ala	His	Ser	Gln	Ser
		435					440					445			
Ser	Pro	Glu	Phe	Lys	Gly	Ser	Leu	Ala	Ser	Leu	Ser	Asp	Ser	Leu	Gly
	450					455					460				
Val	Ser	Val	Met	Ala	Thr	Asp	Gln	Asp	Ser	Tyr	Ser	Thr	Ser	Ser	Thi
465					470					475					480
Glu	Glu	Glu	Leu	Glu	Gln	Phe	Ser	Ser	Pro	Ser	Val	Lys	Lys	Lys	Pro
				485					490					495	
Ser	Met	Tle	Leu	Glv	Lvs	Ala	Arg	His	Arg	Leu	Ser	Phe	Ala	Ser	Phe

			500					505					510		
Ser	Ser	Met	Phe	His	Ala	Phe	Leu	Ser	Asn	Asn	Arg	Lys	Leu	Tyr	Lys
		515					520					525			
Lys	Val	Val	Glu	Leu	Ala	Gln	Asp	Lys	Gly	Ser	Tyr	Phe	Gly	Ser	Leu
	530					535					540				
Val	Gln	Asp	Tyr	Lys	Val	Tyr	Ser	Leu	Glu	Met	Met	Alà	Arg	Gln	Thr
545					550					555					560
Ser	Ser	Thr	Glu	Met	Leu	Gln	Glu	Ile	Arg	Thr	Met	Met	Thr	Gln	Leu
				565					570					575	
Lys	Ser	Tyr	Leu	Leu	Gln	Ser	Thr	Glu	Leu	Lys	Ala	Leu	Val	Asp	Pro
			580					585					590		
Ala	Leu	His	Ser	Glu	Glu	Glu	Leu	Glu	Ala	Ile	Val	Glu	Ser	Ala	Leu
		595					600					605			
Tyr	Lys	Cys	Val	Leu	Lys	Pro	Leu	Lys	Glu	Ala	Ile	Asn	Ser	Cys	Leu
	610					615					620				
His	Gln	Ile	His	Ser	Lys	Asp	Gly	Ser	Leu	Gln	Gln	Leu	Lys	Glu	Asn
625					630					635					640
Gln	Leu	Val	Ile	Leu	Ala	Thr	Thr	Thr	Thr	Asp	Leu	Gly	Val	Thr	Thr
				645					650					655	
Ser	Val	Pro	Glu	Val	Pro	Met	Met	Glu	Lys	Ile	Leu	Gln	Lys	Phe	Thr
			660					665					670		
Ser	Met	His	Lys	Ala	Tyr	Ser	Pro	Glu	Lys	Lys	Ile	Ser	Ile	Leu	Leu
		675					680					685			
Lys	Thr	Cys	Lys	Leu	Ile	Tyr	Asp	Ser	Met	Ala	Leu	Gly	Asn	Pro	Gly
	690					695					700				
Lys	Pro	Tyr	Gly	Ala	Asp	Asp	Phe	Leu	Pro	Val	Leu	Met	Tyr	Val	Leu
705					710					715					720
Ala	Arg	Ser	Asn	Leu	Thr	Glu	Met	Leu		Asn	Val	Glu	Tyr	Met	Met
				725					730					735	

Glu Leu Met Asp Pro Ala Leu Gln Leu Gly Glu Gly Ser Tyr Tyr Leu Thr Thr Thr Tyr Gly Ala Leu Glu His Ile Lys Ser Tyr Asp Lys Ile Thr Val Thr Arg Gln Leu Ser Val Glu Val Gln Asp Ser Ile His Arg Trp Glu Arg Arg Arg Thr Leu Asn Lys Ala Arg Ala Ser Arg Ser Ser Val Gln Asp Phe Ile Cys Val Ser Tyr Leu Glu Pro Glu Gln Gln Ala Arg Thr Leu Ala Ser Arg Ala Asp Thr Gln Ala Gln Ala Leu Cys Ala Gln Cys Ala Glu Lys Phe Ala Val Glu Arg Pro Gln Ala His Arg Leu Phe Val Leu Val Asp Gly Arg Cys Phe Gln Leu Ala Asp Asp Ala Leu Pro His Cys Ile Lys Gly Tyr Leu Leu Arg Ser Glu Pro Lys Arg Asp Phe His Phe Val Tyr Arg Pro Leu Asp Gly Gly Gly Gly Gly Gly Ser Pro Pro Cys Leu Val Val Arg Glu Pro Asn Phe Leu

<210> 3546

<211> 276

<212> PRT

<213> Homo sapiens

<400>	3546

Met	Leu	Arg	Asp	Ser	Glu	Ala	Glu	Val	Thr	Glu	Glu	Asp	Pro	Arg	Leu
1				5					10					15	

Arg Ala Gln Gln Leu His His Arg Val Leu Thr Leu Gln Cys Gln Leu
20 25 30

Arg Asp Gln Gly Ala Ala His Gln Ala Ser Leu Asp Glu Ala Thr Arg
35 40 45

Leu Gln Glu Glu Leu Gln Ala Lys Leu Glu Glu Leu Gln Lys Lys Gln
50 55 60

His Glu Ala Lys Leu Ala Val Thr Pro Leu Lys Ala Lys Ile Ala Ser
65 70 75 80

Leu Val Arg Lys Cys Arg Glu Arg Asn Arg Leu Ile Thr His Leu Leu 85 90 95

Gln Glu Leu His Arg His Gly Leu Gly Asn Leu Leu Leu Ser Glu Leu
100 105 110

Ala Gln Asn Met Leu Asn Asp Val Ala Leu Ala Glu Tyr Thr Ala Thr
115 120 125

Phe Leu Ala Pro Gly Val Pro Glu Thr Ser His His Leu Asp Val Lys
130 135 140

Ser Glu Met Thr Ala Ala Leu Arg Ala Gln Thr Tyr Leu Leu Asn Pro 145 150 155 160

Glu Met Asp Ser Val Leu Gln Ser Ser Leu Ser Ser Glu Ser Trp Pro 165 170 175

Ile Pro Glu Pro Glu Trp Pro Ala Gln Thr Ala Gln Leu Asp Ser Leu 180 185 190

Lys Leu Pro Leu Ser Leu Val Ser Thr Leu Asp Pro Gly Thr Cys Leu 195 200 205

Ala Ala Val Thr Val Glu Pro Gly Leu Pro Ala Gln Arg Leu Gln Glu 210 215 220 <210> 3547

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3547

Met Ala Ala Ala Leu Arg Ala Pro Thr Gln Gly Cys Val Thr Phe

1 5 10 15

Glu Asp Ile Ala Ile Tyr Phe Ser Gln Asp Glu Trp Gly Leu Leu Asp

20 25 30

Glu Ala Gln Arg Leu Leu Tyr Leu Glu Val Met Leu Glu Asn Phe Ala 35 40 45

Leu Val Ala Ser Leu Gly Cys Gly His Gly Thr Glu Asp Glu Glu Thr
50 55 60

Pro Ser Asp Gln Asn Val Ser Val Gly Val Ser Gln Ser Lys Ala Gly
65 70 75 80

Ser Ser Thr Gln Lys Thr Gln Ser Cys Glu Met Cys Val Pro Val Leu 85 90 95

Lys Asp Ile Leu His Leu Ala Asp Leu Pro Gly Gln Lys Pro Tyr Leu

			100					105					110		
Val	Gly	Glu	Cys	Thr	Asn	His	His	Gln	His	Gln	Lys	His	His	Ser	Ala
		115					120					125			
Lys	Lys	Ser	Leu	Lys	Arg	Asp	Met	Asp	Arg	Ala	Ser	Tyr	Val	Lys	Cys
	130					135					140				
Cys	Leu	Phe	Cys	Met	Ser	Leu	Lys	Pro	Phe	Arg	Lys	Trp	Glu	Val	Gly
145					150					155					160
Lys	Asp	Leu	Pro	Ala	Met	Leu	Arg	Leu	Leu	Arg	Ser	Leu	Val	Phe	Pro
				165					170					175	
Gly	Gly	Lys	Lys	Pro	Gly	Thr	Ile	Thr	Glu	Cys	Gly	Glu	Asp	Ile	Arg
			180					185					190		
Ser	Gln	Lys	Ser	His	Tyr	Lys	Ser	Gly	Glu	Cys	Gly	Lys	Ala	Ser	Arg
		195					200					205			
His	Gln	His	Thr	Pro	Val	Tyr	His	Pro	Arg	Val	Tyr	Thr	Gly	Lys	Lys
	210					215					220				
Leu	Tyr	Glu	Cys	Ser	Lys	Cys	Gly	Lys	Ala	Phe	Arg	Gly	Lys	Tyr	Ser
225					230					235					240
Leu	Val	Gln	His	Gln	Arg	Val	His	Thr	Gly	Glu	Arg	Pro	Trp	Glu	Cys
				245					250					255	
Asn	Glu	Cys	Gly	Lys	Phe	Phe	Ser	Gln	Thr	Ser	His	Leu	Asn	Asp	His
			260					265					270		
Arg	Arg	Ile	His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly
		275					280					285			
Lys	Leu	Phe	Arg	Gln	Asn	Ser	Ser	Leu	Val	Asp	His	Gln	Lys	Ile	His
	290					295					300				
Thr	Gly	Ala	Arg	Pro	Tyr	Glu	Cys	Ser	Gln	Cys	Gly	Lys	Ser	Phe	Ser
305					310					315					320
Gln	Lys	Ala	Thr	Leu	Val	Lys	His	Gln	Arg	Val	His	Thr	Gly	Glu	Arg
				325					330					335	

Pro Tyr Lys Cys Gly Glu Cys Gly Asn Ser Phe Ser Gln Ser Ala Ile 340 345 350 Leu Asn Gln His Arg Arg Ile His Thr Gly Ala Lys Pro Tyr Glu Cys 360 355 365 Gly Gln Cys Gly Lys Ser Leu Ser Gln Lys Ala Thr Leu Ile Lys His 375 380 370 Gln Arg Val His Thr Gly Glu Arg Pro Tyr Lys Cys Gly Asp Cys Gly 385 390 395 400 Lys Ser Phe Ser Gln Ser Ser Ile Leu Ile Gln His Arg Arg Ile His 405 410 415 Thr Gly Ala Arg Pro Tyr Glu Cys Gly Gln Cys Gly Lys Ser Phe Ser 430 420 425 Gln Lys Ser Gly Leu Ile Gln His Gln Val Val His Thr Gly Glu Arg 435 440 445 Pro Tyr Glu Cys Asn Lys Cys Gly Asn Ser Phe Ser Gln Cys Ser Ser 460 450 455 Leu Ile His His Gln Lys Cys His Asn Thr 470 465

<210> 3548

<211> 372

<212> PRT

<213> Homo sapiens

<400> 3548

Met Arg Ala Ile Leu Lys Met Gly Gln Leu Cys Gly Asp His Pro Leu

1 5 10 15

Gly Ala Val Thr Phe Arg Cys Val Ala Leu Val Ala Val Trp Leu Cys

			20					25					30		
Gly	Thr	Ala	Thr	Arg	Ser	His	Val	Gly	Lys	Asp	Ser	Cys	Gly	Leu	Gly
		35					40					45			
Thr	Glu	Leu	Ser	Leu	Leu	Gly	Val	Ser	Arg	Cys	Trp	Gly	Glu	Gly	Arg
	50					55					60				
Gln	Ser	Ser	Gln	Ser	Pro	Ser	Thr	Ala	His	Pro	Ala	Ala	Arg	Pro	Trp
65					70					75					80
Pro	Val	Asn	Pro	Pro	Ser	Pro	Phe	Leu	Pro	Gln	Glu	Ala	Val	Glu	Lys
				85					90					95	
Val	Thr	Gln	His	Ile	His	Gly	Leu	Ser	Gly	Lys	Lys	Asp	Gly	Leu	Val
			100					105					110		
Pro	Met	Phe	Ile	Asn	Thr	His	Ser	Gly	Leu	Phe	Thr	His	Leu	Gly	Val
		115					120					125			
Phe	Thr	Leu	Gly	Ala	Arg	Ala	Asp	Ser	Tyr	Tyr	Glu	Tyr	Leu	Leu	Lys
	130					135					140				
Gln	Trp	Ile	Gln	Gly	Gly	Lys	Gln	Glu	Thr	Gln	Leu	Leu	Glu	Asp	Tyr
145					150					155					160
Val	Glu	Ala	Ile	Glu	Gly	Val	Arg	Thr	His	Leu	Leu	Arg	His	Ser	Glu
				165					170					175	
Pro	Ser	Lys	Leu	Thr	Phe	Val	Gly	Glu	Leu	Ala	His	Gly	Arg	Phe	Ser
			180					185					190		
Ala	Lys	Met	Asp	His	Leu	Val	Cys	Phe	Leu	Pro	Gly	Thr	Leu	Ala	Leu
		195					200					205			
Gly	Val	Tyr	His	Gly	Leu	Pro	Ala	Ser	His	Met	Glu	Leu	Ala	Gln	Glu
	210					215					220				
Leu	Met	Glu	Thr	Cys	Tyr	Gln	Met	Asn	Arg	Gln	Met	Glu	Thr	Gly	Leu
225					230					235					240
Ser	Pro	Glu	Ile	Val	His	Phe	Asn	Leu	Tyr	Pro	Gln	Pro	Gly	Arg	Arg
				245					250					255	

Asp Val Glu Val Lys Pro Ala Asp Arg His Asn Leu Leu Arg Pro Glu 270 260 265 Thr Val Glu Ser Leu Phe Tyr Leu Tyr Arg Val Thr Gly Asp Arg Lys 280 285 275 Tyr Gln Asp Trp Gly Trp Glu Ile Leu Gln Ser Phe Ser Arg Phe Thr 300 295 290 Arg Val Pro Ser Gly Gly Tyr Ser Ser Ile Asn Asn Val Gln Asp Pro 320 315 305 310 Gln Lys Pro Glu Pro Arg Asp Lys Met Glu Ser Phe Phe Leu Gly Glu 335 325 330 Thr Leu Lys Tyr Leu Phe Leu Leu Phe Ser Asp Asp Pro Asn Leu Leu 350 340 345 Ser Leu Asp Ala Tyr Val Phe Asn Thr Glu Ala His Pro Leu Pro Ile 365 355 360 Trp Thr Pro Ala 370

<210> 3549

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3549

Met Ala Gly Thr Gly Leu Gly Gly Pro Trp Pro Ile Trp Gly Pro Trp

1 5 10 15

Trp Ala Ser Arg Lys Gly Arg Cys Trp Ser Gly Ser Arg Val Ala Arg
20 25 30

Gln Gln Val Gly Val Thr Pro Val His Ala Ala Gly Val Pro Gly Leu

40 45 35 Met Gln Ala Val Pro Glu Gly Asp Arg Ser Ser Arg Val Gly Trp Pro 50 55 60 Ala Ser Pro Ala Pro Pro Gln Ala Gly Ala Ser Glu Thr Glu Gly Ala 65 70 75 80 Pro Ala Pro Pro His Leu Pro Ser Arg Ala Trp Pro Gly Pro Pro Ser 85 90 95 Ser Thr Pro Gly Ser Val Arg Ser Gly Ala Gly Ala 100 105

<210> 3550

<211> 405

<212> PRT

<213> Homo sapiens

<400> 3550

Met Arg Ser Ala Glu Leu Gln Glu Ala Leu Gly Ser Gly Asn Leu Leu

1 5 10 15

Asn Tyr Cys Gln Asn Lys Ser Gln Gln Ala Leu Leu Gln Ser Glu Lys
20 25 30

Met Leu Trp Gln Phe Leu Lys Val Thr Leu Glu Gln Asp Ser Arg Met
35 40 45

Lys Phe Leu Lys Leu Gly Tyr Ser Lys Asp Glu Leu Gln Lys Lys
50 55 60

Val Ala Thr Trp Leu Lys Ser Asp Val Gly Leu Gly Glu Ser Pro Gln 65 70 75 80

Pro Lys Gly Asn Asp Leu Asn Ser Asp Arg Gln Gln Ala Phe Cys Ser 85 90 95

Gln	Ala	Ser	Lys	His	Thr	Thr	Lys	Glu	Ala	Ser	Ala	Ser	Ser	Ala	Phe
			100					105					110		
Phe	Asp	Glu	Leu	Val	Pro	Gln	Asn	Met	Thr	Pro	Trp	Glu	Ile	Pro	Ile
		115					120					125			
Thr	Lys	Asp	Ile	Asp	Gly	Leu	Leu	Ser	Gln	Ala	Leu	Leu	Leu	Gly	Glu
	130					135					140				
Leu	Gly	Pro	Ala	Val	Glu	Leu	Cys	Leu	Lys	Glu	Glu	Arg	Phe	Ala	Asp
145					150					155					160
Ala	Ile	Ile	Leu	Ala	Gln	Ala	Gly	Gly	Thr	Asp	Leu	Leu	Lys	Gln	Thr
				165					170					175	
Gln	Glu	Arg	Tyr	Leu	Ala	Lys	Lys	Lys	Thr	Lys	Ile	Ser	Ser	Leu	Leu
			180					185					190		
Ala	Cys	Val	Val	Gln	Lys	Asn	Trp	Lys	Asp	Val	Val	Cys	Thr	Cys	Ser
		195					200					205			
Leu	Lys	Asn	Trp	Arg	Glu	Ala	Leu	Ala	Leu	Leu	Leu	Thr	Tyr	Ser	Gly
	210					215					220				
Thr	Glu	Lys	Phe	Pro	Glu	Leu	Cys	Asp	Met	Leu	Gly	Thr	Arg	Met	Glu
225					230					235					240
Gln	Glu	Gly	Ser	Arg	Ala	Leu	Thr	Ser	Glu	Ala	Arg	Leu	Cys	Tyr	Val
				245					250					255	
Cys	Ser	Gly	Ser	Val	Glu	Arg	Leu	Val	Glu	Cys	Trp	Ala	Lys	Cys	His
			260					265					270		
Gln	Ala	Leu	Ser	Pro	Met	Ala	Leu	Gln	Asp	Leu	Met	Glu	Lys	Val	Met
		275					280					285			
Val	Leu	Asn	Arg	Ser	Leu	Glu	Gln	Leu	Arg	Gly	Pro	His	Gly	Val	Ser
	290					295					300				
Pro	Gly	Pro	Ala	Thr	Thr	Tyr	Arg	Val	Thr	Gln	Tyr	Ala	Asn	Leu	Leu
305					310					315					320
Ala	Ala	Gln	Gly	Ser	Leu	Ala	Thr	Ala	Met	Ser	Phe	Leu	Pro	Arg	Asp

Cys Ala Gln Pro Pro Val Gln Gln Leu Arg Asp Arg Leu Phe His Ala Gln Gly Ser Ala Val Leu Gly Gln Gln Ser Pro Pro Phe Pro Phe Pro Arg Ile Val Val Gly Ala Thr Leu His Ser Lys Glu Thr Ser Ser Tyr Arg Leu Gly Ser Gln Pro Ser His Gln Val Arg Pro Arg Leu Phe Ile His Leu Phe Ile Gln <210> 3551 <211> 761 <212> PRT

<400> 3551

<213> Homo sapiens

Met Leu Gly Leu Arg Pro Pro Leu Leu Ala Leu Val Gly Leu Leu Ser Leu Gly Cys Val Leu Ser Gln Glu Cys Thr Lys Phe Lys Val Ser Ser Cys Arg Glu Cys Ile Glu Ser Gly Pro Gly Cys Thr Trp Cys Gln Lys Leu Asn Ser Ile Arg Cys Asp Thr Arg Pro Gln Leu Leu Met Arg Gly Cys Ala Ala Asp Asp Ile Met Asp Pro Thr Ser Leu Ala Glu Thr Gln

Glu	Asp	His	Asn	Gly	Gly	Gln	Lys	Gln	Leu	Ser	Pro	Gln	Lys	Val	Thr
				85					90					95	
Leu	Tyr	Leu	Arg	Pro	Gly	Gln	Ala	Ala	Ala	Phe	Asn	Val	Thr	Phe	Arg
			100					105					110		
Arg	Ala	Lys	Gly	Tyr	Pro	Ile	Asp	Leu	Tyr	Tyr	Leu	Met	Asp	Leu	Ser
		115					120					125			
Tyr	Ser	Met	Leu	Asp	Asp	Leu	Arg	Asn	Val	Lys	Lys	Leu	Gly	Gly	Asp
	130					135					140				
Leu	Leu	Arg	Ala	Leu	Asn	Glu	Ile	Thr	Glu	Ser	Gly	Arg	Ile	Gly	Phe
145					150					155					160
Gly	Ser	Phe	Val	Asp	Lys	Thr	Val	Leu	Pro	Phe	Val	Asn	Thr	His	Pro
				165					170					175	
Asp	Lys	Leu	Arg	Asn	Pro	Cys	Pro	Asn	Lys	Glu	Lys	Glu	Cys	Gln	Pro
			180					185					190		
Pro	Phe	Ala	Phe	Arg	His	Val	Leu	Lys	Leu	Thr	Asn	Asn	Ser	Asn	Gln
		195					200					205			
Phe	Gln	Thr	Glu	Val	Gly	Lys	Gln	Leu	Ile	Ser	Gly	Asn	Leu	Asp	Ala
	210					215					220				
Pro	Glu	Gly	Gly	Leu	Asp	Ala	Met	Met	Gln	Val	Ala	Ala	Cys	Pro	Glu
225					230					235					240
Glu	Ile	Gly	Trp		Asn	Val	Thr	Arg		Leu	Val	Phe	Ala	Thr	Asp
				245					250					255	
Asp	Gly	Phe		Phe	Ala	Gly	Asp		Lys	Leu	Gly	Ala		Leu	Thr
			260					265					270		
Pro	Asn		Gly	Arg	Cys	His		Glu	Asp	Asn	Leu		Lys	Arg	Ser
		275				_	280	_	_	_	_	285	_		
Asn		Phe	Asp	Tyr	Pro		Val	Gly	Gln	Leu		His	Lys	Leu	Ala
	290					295					300				
Glu	Asn	Asn	Ile	Gln	Pro	Ile	Phe	Ala	Val	Thr	Ser	Arg	Met	Val	Lys

30	5				310					315					320
Th	r Tyr	Glu	Lys	Leu	Thr	Glu	Ile	Ile	Pro	Lys	Ser	Ala	Val	Gly	Glu
				325					330					335	
Le	u Ser	Glu	Asp	Ser	Ser	Asn	Val	Val	His	Leu	Ile	Lys	Asn	Ala	Tyr
			340					345					350		
Ası	n Lys	Leu	Ser	Ser	Arg	Val	Phe	Leu	Asp	His	Asn	Ala	Leu	Pro	Asp
		355					360					365			
Th	r Leu	Lys	Val	Thr	Tyr	Asp	Ser	Phe	Cys	Ser	Asn	Gly	Val	Thr	His
	370					375					380				
Ar	g Asn	Gln	Pro	Arg	Gly	Asp	Cys	Asp	Gly	Val	Gln	Ile	Asn	Val	Pro
38	5				390					395					400
Ιl	e Thr	Phe	Gln	Val	Lys	Val	Thr	Ala	Thr	Glu	Cys	Ile	Gln	Glu	Gln
				405					410					415	
Se	r Phe	Val	Ile	Arg	Ala	Leu	Gly	Phe	Thr	Asp	Ile	Val	Thr	Val	Gln
			420					425					430		
Va	l Leu	Pro	Gln	Cys	Glu	Cys.	Arg	Cys	Arg	Asp	Gln	Ser	Arg	Asp	Arg
		435					440					445			
Se	r Leu	Cys	His	Gly	Lys	Gly	Phe	Leu	Glu	Cys	Gly	Ile	Cys	Arg	Cys
	450					455					460				
As	p Thr	Gly	Tyr	Ile	Gly	Lys	Asn	Cys	Glu	Cys	Gln	Thr	Gln	Gly	Arg
46	5				470					475					480
Se	r Ser	Gln	Glu	Leu	Glu	Gly	Ser	Cys	Arg	Lys	Asp	Asn	Asn	Ser	Ile
				485					490					495	
Il	e Cys	Ser	Gly	Leu	Gly	Asp	Cys	Val	Cys	Gly	Gln	Cys	Leu	Cys	His
			500					505					510		
Th	r Ser	Asp	Val	Pro	Gly	Lys	Leu	Ile	Tyr	Gly	Gln	Tyr	Cys	Glu	Cys
		515					520					525			
As	p Thr	Ile	Asn	Cys	Glu	Arg	Tyr	Asn	Gly	Gln	Val	Cys	Gly	Gly	Pro
	530					535					540				

Gly	Arg	Gly	Leu	Cys	Phe	Cys	Gly	Lys	Cys	Arg	Cys	His	Pro	Gly	Phe
545					550					555					560
Glu	Gly	Ser	Ala	Cys	Gln	Cys	Glu	Arg	Thr	Thr	Glu	Gly	Cys	Leu	Asn
				565					570					575	
Pro	Arg	Arg	Val	Glu	Cys	Ser	Gly	Arg	Gly	Arg	Cys	Arg	Cys	Asn	Val
			580					585					590		
Cys	Glu	Cys	His	Ser	Gly	Tyr	Gln	Leu	Pro	Leu	Cys	Gln	Glu	Cys	Pro
		595					600					605			
Gly	Cys	Pro	Ser	Pro	Cys	Gly	Lys	Tyr	Ile	Ser	Cys	Ala	Glu	Cys	Leu
	610					615					620				
Lys	Phe	Glu	Lys	Gly	Pro	Phe	Gly	Lys	Asn	Cys	Ser	Ala	Ala	Cys	Pro
625				•	630					635					640
Gly	Leu	Gln	Leu	Ser	Asn	Asn	Pro	Val	Lys	Gly	Arg	Thr	Cys	Lys	Glu
				645					650					655	
Arg	Asp	Ser	Glu	Gly	Cys	Trp	Val	Ala	Tyr	Thr	Leu	Glu	Gln	Gln	Asp
			660					665				•	670		
Gly	Met	Asp	Arg	Tyr	Leu	Ile	Tyr	Val	Asp	Glu	Ser	Arg	Glu	Cys	Val
		675					680					685			
Ala	Gly	Pro	Asn	Ile	Ala	Ala	Ile	Val	Gly	Gly	Thr	Val	Ala	Gly	Ile
	690					695					700				
Val	Leu	Ile	Gly	Ile	Leu	Leu	Leu	Val	Ile	Trp	Lys	Ala	Leu	Ile	His
705					710					715					720
Leu	Ser	Asp	Leu	Arg	Glu	Tyr	Arg	Arg	Phe	Glu	Lys	Glu	Lys	Leu	Lys
				725					730					735	
Ser	Gln	Trp	Asn	Asn	Asp	Asn	Pro	Leu	Phe	Lys	Ser	Ala	Thr	Thr	Thr
			740					745					750		
Val	Met	Asn	Pro	Lys	Phe	Ala	Glu	Ser							
		755					760								

<210> 3552 <211> 175 <212> PRT <213> Homo sapiens <400> 3552 Met Gly Ser Phe Val Thr Leu Asp Cys Glu Pro Leu Pro Leu Leu Ala Pro Gln Ala Gly Ala Pro Ser Leu Gln Gly Leu Gly Leu Glu Arg Gln Ala His Leu Gly Leu Asn Val Pro Ser Pro Ala Ala Thr Val Pro Pro Arg Pro Ser Thr Pro Glu Ala Leu Thr Ser Phe Gly His Leu Ala Val Leu Trp Ala Ser Pro Leu Pro Arg Ser Pro Cys Gly Arg Pro Gly Pro Ser Gly Cys Phe Lys Gly Ser Thr Ala Pro Pro Leu His Leu Ala Ser Leu Gln His Pro Val Pro Gly Ala Pro Leu Ser Cys Leu Gly Gln Pro Gly Leu Pro Ala Pro Cys Pro Pro Leu Ala Leu Ser Asn Leu Pro Phe Tyr Ser Cys His Leu Gly Ser Gln Met Pro Ser Trp Thr Gln Leu Pro Glu Leu Ala Pro Pro Trp Gly Leu Ala Pro Ser Thr Pro Trp Gln Glu

Gln Pro Thr Pro Trp Ser Arg Phe Pro Tyr Pro Trp Ile Leu Asp

<210> 3553

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3553

Met Gly Gly Tyr Leu Lys Thr Arg Pro Trp Thr Leu Gln His Phe Tyr

1 5 10 15

Leu Cys Leu Met Pro Ala Ala Thr Trp Leu Val Leu Leu Leu Leu Leu 20 25 30

Trp Leu Ser Leu Gly Val Lys Thr Ala Ala Pro Asn Pro Arg Thr Phe
35 40 45

Ala Val Leu Gly Arg Ile Thr Ala Ala Arg Gly Glu Val Ala Thr Val
50 55 60

Met Asn Ser Ala Met Trp His Gln Thr Ala Thr Gln Thr Thr Val Ser

65 70 75 80

Ser Ala Thr Pro Val Thr His Ile Gln Ala Arg Phe His Leu Gln Gln 85 90 95

Ser Trp Met Arg Trp Leu Ala Glu Ala Asn Pro Leu Pro Ala Leu Gln
100 105 110

Ala Lys Ala Gly Met Trp Pro Arg Trp Phe Leu Arg Ser Leu Thr Ile
115 120 125

Leu Arg Ser Cys Ile Leu Ser Ile Ser Gly Gln Arg Cys Leu His Ala 130 135 140

Pro Ser Ser Phe Val Ser Leu Met Phe Leu Ala Thr Cys Tyr Ser Ser 145 150 155 160

Leu Ser Tyr Phe Ser Arg Phe His Arg Glu Arg Phe Ser Cys Pro Trp

165 170 175

<210> 3554

<211> 237

<212> PRT

<213> Homo sapiens

<400> 3554

Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Ala Ala Lys Lys His

1 5 10 15

Met Arg Lys Cys Ser Leu Ser Leu Ala Ile Arg Glu Met Gln Ile Lys

20 25 30

Thr Thr Met Arg Tyr His Leu Thr Ala Val Arg Met Ala Ile Ile Lys

35 40 45

Lys Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Thr Gly Thr

50 55 60

Leu Leu His Cys Trp Trp Asp Cys Lys Leu Val Gln Pro Leu Trp Lys

65 70 75 80

Ser Val Trp Gln Phe Phe Arg Asp Leu Glu Leu Glu Ile Pro Phe Asp

85 90 95

Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys Ser Cys

100 105 110

Cys Tyr Lys Asp Thr Cys Thr His Met Phe Ile Glu Ala Leu Phe Thr

115 120 125

Ile Ala Lys Thr Trp Asn Gln Pro Lys Cys Pro Thr Met Ile Asp Trp

130 135 140

Ile Lys Lys Met Trp His Ile Tyr Thr Met Glu Tyr Tyr Ala Ala Ile

145 150 155 160

Lys Asn Asp Glu Phe Met Ser Phe Val Gly Thr Trp Met Lys Leu Glu 165 170 175

Thr Ile Ile Leu Ser Lys Leu Ser Gln Gly Gln Lys Asn Gln Thr Pro
180 185 190

His Val Leu Thr His Arg Trp Glu Leu Asn Asn Glu Ile Thr Trp Thr
195 200 205

Gln Glu Gly Glu His His Thr Leu Gly Thr Val Val Arg Trp Gly Glu 210 215 220

235

Gly Gly Gly Ile Ala Leu Gly Asp Ile Pro Asn Val Lys

230

<210> 3555

225

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3555

Met Tyr Met Tyr Val Leu Cys Ile Ser His Thr Tyr Val Tyr Ile Thr

1 5 10 15

His Ile Cys Met Tyr Ile Thr His Ile Cys Val Tyr Gln Thr His Val
20 25 30

Cys Val Tyr His Thr His Met Tyr Val Tyr His Thr Tyr Met Tyr Val

35 40 45

Tyr His Thr His Ile Cys Met Tyr Ile Thr His Ile Cys Met Tyr Ile
50 55 60

Thr His Ile Tyr Val Cys Ile Ser His Ile Tyr Met Tyr Val Tyr His
65 70 75 80

Ala Tyr Met Cys Met Tyr Ile Thr Tyr Met Cys Val Tyr His Thr Tyr

125

Met His Val Tyr His Thr Tyr Met Cys Val Tyr His Ile Tyr Ile Tyr

100

105

Met His Asp Pro Tyr Leu Lys Val Gly Tyr Phe Ile Thr Lys Tyr Gln

120

Tyr

<210> 3556

<211> 112

<212> PRT

<213> Homo sapiens

115

<400> 3556

Met Pro Leu Phe Pro Leu Pro Cys Pro Trp Glu Ser Trp Arg Gln Leu

1 5 10 15

Thr Ser Cys Pro Glu Gly Ser Thr Ala Leu Thr Phe Ser Leu Val Ala 20 25 30

Ala Ala Ile Leu Leu Gly Ser Ala Gln Lys Ala Leu Val Leu Lys
35 40 45

Ala Thr Leu Pro Leu Pro Ala Ala Pro Asp Pro Pro Glu Pro Val Leu 50 55 60

Leu Pro Pro Gly Pro Arg Leu Val Leu Val Phe Thr Leu Leu Arg
65 70 75 80

Ala Ser Glu Ser Arg Asp Ile Trp Gly His Asp Cys Val Ser Leu Gly
85 90 95

Ser Phe Gln Lys Arg Leu Arg Lys Leu Leu Leu Arg Asn Leu Ala Leu 100 105 110

<210> 3557

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3557

Met Glu Val Leu Ile Ala Ser Leu Glu Lys Ser Val Leu Gly Cys Trp

1 5 10 15

Lys Gly Leu Leu Pro Ser Ser Glu Glu Pro Gly Pro Ala Gln Glu

20 25 30

Ala Ser Arg Leu Gln Glu Leu Leu Gln Asp Cys Gly Trp Lys Tyr Pro

35 40 45

Asp Arg Thr Leu Leu Lys Ile Met Leu Ser Gly Ala Gly Ala Leu Thr

50 55 60

Pro Gln Asp Ile Gln Ala Leu Ala Tyr Gly Leu Cys Pro Thr Gln Pro

65 70 75 80

Glu Arg Ala Gln Glu Leu Leu Asn Glu Ala Val Gly Arg Leu Gln Gly

85 90 95

Leu Thr Val Pro Ser Asn Ser His Leu Val Leu Val Leu Asp Lys Asp

100 105 110

Leu Gln Lys Leu Pro Trp Glu Ser Met Pro Ser Leu Gln Ala Leu Pro

115 120 125

Val Thr Arg Leu Pro Ser Phe Arg Phe Leu Leu Ser Tyr Ser Ile Ile

130 135 140

Lys Glu Tyr Gly Ala Ser Pro Val Leu Ser Gln Gly Val Asp Pro Arg

145 150 155 160

Ser Thr Phe Tyr Val Leu Asn Pro His Asn Asn Leu Ser Ser Thr Glu

Glu Gln Phe Arg Ala Asn Phe Ser Ser Glu Ala Gly Trp Arg Gly Val Val Gly Glu Val Pro Arg Pro Glu Gln Val Gln Glu Ala Leu Thr Lys His Asp Leu Tyr Ile Tyr Ala Gly His Gly Ala Gly Ala Arg Phe Leu Asp Gly Gln Ala Val Leu Arg Leu Ser Cys Arg Ala Val Ala Leu Leu Phe Gly Cys Ser Ser Ala Ala Leu Ala Val His Gly Asn Leu Glu Gly Ala Gly Ile Val Leu Lys Tyr Ile Met Ala Gly Cys Pro Leu Phe Leu Gly Asn Leu Trp Asp Val Thr Asp Arg Asp Ile Asp Arg Tyr Thr Glu Thr Leu Leu Gln Gly Trp Leu Gly Ala Gly Pro Gly Ala Pro Leu Leu Tyr Tyr Val Asn Gln Ala Arg Gln Ala Pro Arg Leu Lys Tyr Leu Ile Gly Ala Ala Pro Ile Ala Tyr Gly Leu Pro Val Ser Leu Arg

<210> 3558

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3558

Met Lys Val Thr Ser Leu Phe Lys Phe Gln Ile Gln Gly Pro Arg Cys 5 10 15 1 Ser Ser Lys Asp Ala Gly Val Gly Pro Cys Ala Arg Thr Lys Ser Met 20 25 30 Phe Gln Ile Lys Ser Arg Pro Ala Ser Arg Ser Asn Ile Gln Asp Gln 40 35 45 Val Gln Ile Gln Ile Gln Arg Arg Gly Pro Gln Pro Gly Thr Asn Ser 60 50 55 Ser Pro Arg Ser Lys Ser Lys Val Gln Val Asn Leu Gln Gly Pro Asp 70 75 80 65 His Gly Pro Lys Ser Lys Ile His Met Glu Val Gln Val Pro Cys Pro 90 95 85 Arg Pro Lys Asn Asp Ser Asp Pro Phe His Asp Gln Gly Ser Gly Leu 110 100 105 Arg

<210> 3559

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3559

Met Pro Ile Leu Gly Leu Leu Val Ser Pro Leu Pro Pro Ser Gln Gly

1 5 10 15

Leu Met Val Ser Ser Asp Pro Leu Thr Gln Ser Phe Ile Ser Asp Ser
20 25 30

Thr Cys Ser Phe Pro Val Thr Leu Lys Cys Ala Gln Ile Ser Leu Ser

Leu Lys Glu Ile Leu Trp Thr Pro Leu Ala Ala Thr Leu Pro His Cys Val His Ser Gln Pro Ser Leu Leu Lys Ala Leu Thr Ala Leu Ser Val Tyr Phe Pro Thr His Phe Pro Ala Leu Cys Pro His His Ser Cys Phe His Gln Ile Thr Asn Asn Leu Leu Val Ala Glu Asn Gln Arg Met Phe Leu Val Leu His Leu Thr Thr Pro Phe Leu Lys Lys Arg Ile Cys Leu Thr Ser Val Val Ser His Ser Trp Phe Phe Pro Cys Leu Ser Gly Ser Ser Leu Ser Val Pro Val Gln Arg Gly Ser Ala Val Trp Ile Ser Gly Gln Pro Trp Tyr Leu Arg Thr Trp Ala Trp Glu Thr Gly Leu Gly Ser Tyr Ala Ala Ser Thr Ser Gln Ser Phe Ser Phe Phe Asn

<210> 3560

<211> 1362

<212> PRT

<213> Homo sapiens

<400> 3560

Met Ala Pro Gln Met Tyr Glu Phe His Leu Pro Leu Ser Pro Glu Glu
1 5 10 15

Leu	Leu	Lys	Ser	Gly	Gly	Val	Asn	Gln	Tyr	Val	Val	Gln	Glu	Val	Leu
			20					25					30		
Ser	Ile	Lys	His	Leu	Pro	Pro	Gln	Leu	Arg	Ala	Phe	Gln	Ala	Ala	Phe
		35					40					45			
Arg	Ala	Gln	Gly	Pro	Leu	Ala	Met	Leu	Gln	His	Phe	Asp	Thr	Ile	Tyr
	50					55					60				
Ser	Ile	Leu	His	His	Phe	Arg	Ser	Ile	Asp	Pro	Gly	Leu	Lys	Glu	Asp
65					70					75					80
Thr	Leu	Gln	Phe	Leu	Ile	Arg	Leu	Leu	Glu	Ser	Phe	Glu	Thr	Met	Ala
				85					90					95	
Ser	Gln	Thr	Asn	Leu	Val	Asp	Leu	Asp	Leu	Gly	Gly	Lys	Gly	Lys	Lys
			100					105					110		
Ala	Arg	Thr	Lys	Ala	Ala	His	Gly	Phe	Asp	Trp	Glu	Glu	Glu	Arg	Gln
		115					120					125			
Pro	Ile	Leu	Gln	Leu	Leu	Thr	Gln	Leu	Leu	Gln	Leu	Asp	Ile	Arg	His
	130					135					140				
Leu	Trp	Asn	His	Ser	Ile	Ile	Glu	Glu	Glu	Phe	Val	Ser	Leu	Val	Thr
145					150					155					160
Gly	Cys	Cys	Tyr	Arg	Leu	Leu	Glu	Asn	Pro	Thr	Ile	Asn	His	Gln	Lys
				165				٠	170					175	
Asn	Arg	Pro	Thr	Arg	Glu	Ala	Ile	Thr	His	Leu	Leu	Gly	Val	Ala	Leu
			180					185					190		
Thr	Arg	Tyr	Asn	His	Met	Leu	Ser	Ala	Thr	Val	Lys	Ile	Ile	Gln	Met
		195			·		200					205			
Leu	Gln	His	Phe	Glu	His	Leu	Ala	Pro	Val	Leu	Val	Ala	Ala	Val	Ser
	210					215					220				
Leu	Trp	Ala	Thr	Asp	Tyr	Gly	Met	Lys	Ser	Ile	Val	Gly	Glu	Ile	Val
225					230					235					240
Arg	Glu	Ile	Gly	Gln	Lys	Cys	Pro	Gln	Glu	Leu	Ser	Arg	Asp	Pro	Ser

				245					250					255	
Gly	Thr	Lys	Gly	Phe	Ala	Ala	Phe	Leu	Thr	Glu	Leu	Ala	Glu	Arg	Val
			260					265					270		
Pro	Ala	Ile	Leu	Met	Ser	Ser	Met	Cys	Ile	Leu	Leu	Asp	His	Leu	Asp
		275					280					285			
Gly	Glu	Asn	Tyr	Met	Met	Arg	Asn	Ala	Val	Leu	Ala	Ala	Met	Ala	Glu
	290					295					300				
Met	Val	Leu	Gln	Val	Leu	Ser	Gly	Asp	Gln	Leu	Glu	Ala	Ala	Ala	Arg
305					310					315					320
Asp	Thr	Arg	Asp	Gln	Phe	Leu	Asp	Thr	Leu	Gln	Ala	His	Gly	His	Asp
				325					330					335	
Val	Asn	Ser	Phe	Val	Arg	Ser	Arg	Val	Leu	Gln	Leu	Phe	Thr	Arg	Ile
			340					345					350		
Val	Gln	Gln	Lys	Ala	Leu	Pro	Leu	Thr	Arg	Phe	Gln	Ala	Val	Val	Ala
		355					360					365			
Leu	Ala	Val	Gly	Arg	Leu	Ala	Asp	Lys	Ser	Val	Leu	Val	Cys	Lys	Asn
	370					375					380				
Ala	Ile	Gln	Leu	Leu	Ala	Ser	Phe	Leu	Ala	Asn	Asn	Pro	Phe	Ser	Cys
385					390					395					400
Lys	Leu	Ser	Asp	Ala	Asp	Leu	Ala	Gly	Pro	Leu	Gln	Lys	Glu	Thr	Gln
				405					410					415	
Lys	Leu	Gln	Glu	Met	Arg	Ala	Gln	Arg	Arg	Thr	Ala	Ala	Ala	Ser	Ala
			420					425					430		
Val	Leu	Asp	Pro	Glu	Glu	Glu	Trp	Glu	Ala	Met	Leu	Pro	Glu	Leu	Lys
		435					440					445			
Ser	Thr	Leu	Gln	Gln	Leu	Leu	Gln	Leu	Pro	Gln	Gly	Glu	Glu	Glu	Ιle
	450					455					460				
Pro	Glu	Gln	Ile	Ala	Asn	Thr	Glu	Thr	Thr	Glu	Asp	Val	Lys	Gly	Arg
465					470					475					480

Ile	Tyr	Gln	Leu	Leu	Ala	Lys	Ala	Ser	Tyr	Lys	Lys	Ala	Ile	Ile	Leu
				485					490					495	
Thr	Arg	Glu	Ala	Thr	Gly	His	Phe	Gln	Glu	Ser	Glu	Pro	Phe	Ser	His
			500					505					510		
Ile	Asp	Pro	Glu	Glu	Ser	Glu	Glu	Thr	Arg	Leu	Leu	Asn	Ile	Leu	Gly
		515					520					525			
Leu	Ile	Phe	Lys	Gly	Pro	Ala	Ala	Ser	Thr	Gln	Glu	Lys	Asn	Pro	Arg
	530					535					540				
Glu	Ser	Thr	Gly	Asn	Met	Val	Thr	Gly	Gln	Thr	Val	Cys	Lys	Asn	Lys
545					550					555					560
Pro	Asn	Met	Ser	Asp	Pro	Glu	Glu	Ser	Arg	Gly	Asn	Asp	Glu	Leu	Val
				565					570					575	
Lys	Gln	Glu	Met	Leu	Val	Gln	Tyr	Leu	Gln	Asp	Ala	Tyr	Ser	Phe	Ser
			580					585					590		
Arg	Lys	Ile	Thr	Glu	Ala	Ile	Gly	Ile	Ile	Ser	Lys	Met	Met	Tyr	Glu
		595					600					605			
Asn	Thr	Thr	Thr	Val	Val	Gln	Glu	Val	Ile	Glu	Phe	Phe	Val	Met	Val
	610					615					620				
Phe	Gln	Phe	Gly	Val	Pro	Gln	Ala	Leu	Phe	Gly	Val	Arg	Arg	Met	Leu
625					630					635					640
Pro	Leu	Ile	Trp	Ser	Lys	Glu	Pro	Gly	Val	Arg	Glu	Ala	Val	Leu	Asn
				645					650					655	
Ala	Tyr	Arg	Gln	Leu	Tyr	Leu	Asn	Pro	Lys	Gly	Asp	Ser	Ala	Arg	Ala
			660					665					670		
Lys	Ala	Gln	Ala	Leu	Ile	Gln	Asn	Leu	Ser	Leu	Leu	Leu	Val	Asp	Ala
		675					680					685			
Ser	Val	Gly	Thr	Ile	Gln	Cys	Leu	Glu	Glu	Ile	Leu	Cys	Glu	Phe	Val
	690					695					700				
Gln		Acn	Clu	וום [Tue	Pro	Δla	Val	Thr	Gln	Ī eu	Len	Trn	Glu	Arc

705					710					715					720
Ala	Thr	Glu	Lys	Val	Ala	Cys	Cys	Pro	Leu	Glu	Arg	Cys	Ser	Ser	Val
				725					730					735	
Met	Leu	Leu	Gly	Met	Met	Ala	Arg	Gly	Lys	Pro	Glu	Ile	Val	Gly	Ser
			740					745					750		
Asn	Leu	Asp	Thr	Leu	Val	Ser	Ile	Gly	Leu	Asp	Glu	Asn	Phe	Pro	Gln
		755					760					765			
Asp	Tyr	Arg	Leu	Ala	Gln	Gln	Val	Cys	His	Ala	Ile	Ala	Asn	Ile	Ser
	770					775					780				
Asp	Arg	Arg	Lys	Pro	Ser	Leu	Gly	Lys	Arg	His	Pro	Pro	Phe	Arg	Leu
785					790					795					800
Pro	Gln	Glu	His	Arg	Leu	Phe	Glu	Arg	Leu	Arg	Glu	Thr	Val	Thr	Lys
				805					810					815	
Gly	Phe	Val	His	Pro	Asp	Pro	Leu	Trp	Ile	Pro	Phe	Lys	Glu	Val	Ala
			820					825					830		
Val	Thr	Leu	Ile	Tyr	Gln	Leu	Ala	Glu	Gly	Pro	Glu	Val	Ile	Cys	Ala
		835					840					845			
Gln	Ile	Leu	Gln	Gly	Cys	Ala	Lys	Gln	Ala	Leu	Glu	Lys	Leu	Glu	Glu
	850					855					860				
Lys	Arg	Thr	Ser	Gln	Glu	Asp	Pro	Lys	Glu	Ser	Pro	Ala	Met	Leu	Pro
865					870					875					880
Thr	Phe	Leu	Leu	Met	Asn	Leu	Leu	Ser	Leu	Ala	Gly	Asp	Val	Ala	Leu
				885					890					895	
Gln	Gln	Leu	Val	His	Leu	Glu	Gln	Ala	Val	Ser	Gly	Glu	Leu	Cys	Arg
			900					905					910		
Arg	Arg	Val	Leu	Arg	Glu	Glu	Gln	Glu	His	Lys	Thr	Lys	Asp	Pro	Lys
		915					920					925			
Glu	Lys	Asn	Thr	Ser	Ser	Glu	Thr	Thr	Met	Glu	Glu	Glu	·Leu	Gly	Leu
	930					935					940				

Val	Gly	Ala	Thr	Ala	Asp	Asp	Thr	Glu	Ala	Glu	Leu	Ile	Arg	Gly	Ile
945					950					955					960
Cys	Glu	Met	Glu	Leu	Leu	Asp	Gly	Lys	Gln	Thr	Leu	Ala	Ala	Phe	Val
				965					970					975	
Pro	Leu	Leu	Leu	Lys	Val	Cys	Asn	Asn	Pro	Gly	Leu	Tyr	Ser	Asn	Pro
			980					985					990		
Asp	Leu	Ser	Ala	Ala	Ala	Ser	Leu	Ala	Leu	Gly	Lys	Phe	Cys	Met	Ile
		995				-	1000				-	1005			
Ser	Ala	Thr	Phe	Cys	Asp	Ser	Gln	Leu	Arg	Leu	Leu	Phe	Thr	Met	Leu
]	1010				-	1015					1020				
Glu	Lys	Ser	Pro	Leu	Pro	Ile	Val	Arg	Ser	Asn	Leu	Met	Val	Ala	Thr
1025	5				1030				-	1035				-	1040
Gly	Asp	Leu	Ala	Ile	Arg	Phe	Pro	Asn	Leu	Val	Asp	Pro	Trp	Thr	Pro
			-	1045				-	1050]	1055	
His	Leu	Tyr	Ala	Arg	Leu	Arg	Asp	Pro	Ala	Gln	Gln	Val	Arg	Lys	Thr
]	1060]	1065				-	1070		
Ala	Gly	Leu	Val	Met	Thr	His	Leu	Ile	Leu	Lys	Asp	Met	Val	Lys	Val
]	1075				-	1080				-	1085			
Lys	Gly	Gln	Val	Ser	Glu	Met	Ala	Val	Leu	Leu	Ile	Asp	Pro	Glu	Pro
]	1090					1095					1100				
Gln	Ile	Ala	Ala	Leu	Ala	Lys	Asn	Phe	Phe	Asn	Glu	Leu	Ser	His	Lys
1105	5				1110				•	1115					1120
Gly	Asn	Ala	Ile	Tyr	Asn	Leu	Leu	Pro	Asp	Ile	Ile	Ser	Arg	Leu	Ser
				1125					1130]	135	
Asp	Pro	Glu	Leu	Gly	Val	Glu	Glu	Glu	Pro	Phe	His	Thr	Ile	Met	Lys
			1140]	1145					1150		
Gln	Leu	Leu	Ser	Tyr	Ile	Thr	Lys	Asp	Lys	Gln	Thr	Glu	Ser	Leu	Val
		1155					1160					1165			
Glu	Ive	Leu	Cvs	Gln	Arg	Phe	Arg	Thr	Ser	Ara	Thr	Glu	Arg	Gln	Glr

1175 1180 1170 Arg Asp Leu Ala Tyr Cys Val Ser Gln Leu Pro Leu Thr Glu Arg Gly 1190 1195 1200 1185 Leu Arg Lys Met Leu Asp Asn Phe Asp Cys Phe Gly Asp Lys Leu Ser 1205 1210 1215 Asp Glu Ser Ile Phe Ser Ala Phe Leu Ser Val Val Gly Lys Leu Arg 1220 1225 1230 Arg Gly Ala Lys Pro Glu Gly Lys Ala Ile Ile Asp Glu Phe Glu Gln

1235 1240 1245

Lys Leu Arg Ala Cys His Thr Arg Gly Leu Asp Gly Ile Lys Glu Leu 1250 1255 1260

Glu Ile Gly Gln Ala Gly Ser Gln Arg Ala Pro Ser Ala Lys Lys Pro 1265 1270 1275 1280

Ser Ala Gly Ser Arg Tyr Gln Pro Leu Ala Ser Thr Ala Ser Asp Asn 1285 1290 1295

Asp Phe Val Thr Pro Glu Pro Arg Arg Thr Thr Arg Arg His Pro Asn 1300 1305 1310

Thr Gln Gln Arg Ala Ser Lys Lys Pro Lys Val Val Phe Ser Ser 1315 1320 1325

Asp Glu Ser Ser Glu Glu Asp Leu Ser Ala Glu Met Thr Glu Asp Glu
1330 1335 1340

Thr Pro Lys Lys Thr Thr Pro Ile Leu Arg Ala Ser Ala Arg Arg His
1345 1350 1355 1360

Arg Ser

<210> 3561

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3561

Met Arg Gln Leu Ala His Ser Gly Thr Cys Thr Leu Gly Cys Val His

1 5 10 15

Thr Arg Ala Cys Ala Pro Thr Leu Lys His Arg Val Thr Gln Leu Ile

20 25 30

His Thr His Thr Phe Ser His Thr Gln Thr Gln Gly His Thr Thr Gln

35 40 45

Ile Gln Thr His Thr Leu Pro His Thr Phe Lys His Arg Val Thr Gln

50 55 60

Leu Ile Asn Thr His Thr Asp Thr His Ala Pro Thr His Ser Pro Ser

65 70 75 80

Trp Pro Glu Pro Leu Leu Pro Gly His Lys Gly Ala Asp Glu Arg Cys

85 90 95

Arg Gly Pro Cys Arg Leu Leu Leu Ala Phe Gly Cys Pro Gln Gly Ser

100 105 110

Asn Leu Ala Ala Glu Trp Phe Val Gly Gly Val Leu Lys Ile Gln Thr

115 120 125

Gln Lys Trp Glu Leu Leu Val Gly Gln His Gln Asp Leu Arg Trp Gly

130 135 140

Gly Phe Gly Ser Arg Val

145 150

<210> 3562

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3562

Met Asn Glu Leu Ile Ser Ser Cys Ile Leu Pro Glu Ser Thr Glu Trp

1 5 10 15

Ile Cys Gln Thr Gln Thr Ala Gly Gln Ala Ser Asp Ser Val Gly Leu

20 25 30

Gly Gly Ala Arg Glu Cys Val Phe Leu Thr Ser Ser Arg Met Thr Leu

35 40 45

Met Pro Leu Ala Gly Asp Pro Thr Leu Pro Asp Asp Thr Gly Leu Glu

50 55 60

Ala Gly Cys Val Val Ala Ser Gly Ala Pro Val Val Thr Ala Gly Glu

65 70 75 80

Ser Gly Trp Gln Val Cys Ala Phe Leu Ala Arg His Ser Ala Cys His

85 90 95

Leu Val Tyr Leu Thr Cys Phe Phe Leu His Val Gly Ser Ser Ala Thr

100 105 110

Leu Glu Gly Thr His Ser Asp Lys Leu Gln Asn Ile Arg Glu Trp Gly

115 120 125

Gln Lys Leu Ser Gly Asn Ala Gly Arg Gly Gly Ser Cys Leu

130 135 140

<210> 3563

<211> 354

<212> PRT

<213> Homo sapiens

<400> 3563

Met	Ala	Gly	GIn	Val	Ala	Arg	Val	Val	His	He	Thr	Glu	Asp	Gly	Gln
1				5					10					15	
Val	Ile	Ala	Thr	Ser	Gln	Ser	Gly	Ala	His	Val	Gly	Ser	Val	Val	Pro
			20					25					30		
Gly	Pro	Ile	Leu	Pro	Glu	Gln	Leu	Ala	Asp	Gly	Ala	Thr	Gln	Val	Val
		35					40					45			
Val	Val	Gly	Gly	Ser	Met	Glu	Gly	His	Gly	Met	Asp	Glu	Ser	Leu	Ser
	50					55					60				
Pro	Gly	Gly	Ala	Val	Ile	Gln	Gln	Val	Thr	Lys	Gln	Glu	Ile	Leu	Asn
65					70					75					80
Leu	Ser	Glu	Ala	Gly	Val	Ala	Pro	Pro	Glu	Ala	Ser	Ser	Ala	Leu	Asp
				85					90					95	
Ala	Leu	Leu	Cys	Ala	Val	Thr	Glu	Leu	Gly	Glu	Val	Glu	Gly	Arg	Ala
			100					105					110		
Gly	Leu	Glu	Glu	Gln	Gly	Arg	Pro	Gly	Ala	Lys	Asp	Val	Leu	Ile	Gln
		115					120					125			
Leu	Pro	Gly	Gln	Glu	Val	Ser	His	Val	Ala	Ala	Asp	Pro	Glu	Ala	Pro
	130					135					140				
Glu	Ile	Gln	Met	Phe	Pro	Gln	Ala	Gln	Glu	Ser	Pro	Ala	Ala	Val	Glu
145					150					155					160
Val	Leu	Thr	Gln	Val	Val	His	Pro	Ser	Ala	Ala	Met	Ala	Ser	Gln	Glu
				165					170					175	
Arg	Ala	Gln	Val	Ala	Phe	Lys	Lys	Met	Val	Gln	Gly	Val	Leu	Gln	Phe
			180					185					190		
Ala	Val	Cys	Asp	Thr	Ala	Ala	Ala	Gly	Gln	Leu	Val	Lys	Asp	Gly	Val
		195					200					205			
Thr	Gln	Val	Val	Val	Ser	Glu	Glu	Gly	Ala	Val	His	Met	Val	Ala	Gly
	210					215					220				
Glu	Gly	Ala	Gln	Ile	Ile	Met	Gln	Glu	Ala	Gln	Gly	Glu	His	Met	Asp

Leu Val Glu Ser Asp Gly Glu Ile Ser Gln Ile Ile Val Thr Glu Glu Leu Val Gln Ala Met Val Gln Glu Ser Ser Gly Gly Phe Ser Lys Gly Thr Thr His Tyr Ile Leu Thr Glu Leu Pro Pro Gly Val Gln Asp Glu Pro Gly Leu Tyr Ser His Thr Val Leu Glu Thr Ala Asp Ser Gln Glu Leu Leu Gln Ala Gly Ala Thr Leu Gly Thr Glu Ala Gly Ala Pro Ser Arg Ala Glu Gln Leu Ala Ser Val Val Ile Tyr Thr Gln Glu Gly Ser Ser Ala Ala Ala Ile Gln Ser Gln Arg Glu Ser Ser Glu Leu Gln Glu Ala <210> 3564 <211> 166 <212> PRT <213> Homo sapiens

<400> 3564
Met Cys Leu Cys Arg Pro Leu Leu Pro Gln Arg Ala Gln Tyr Gln Asp
1 5 10 15
Lys Leu Ala Arg Gln Arg Tyr Glu Asp Gln Leu Lys Gln Gln Gln Leu
20 25 30

Leu Asn Val Glu Asn Leu Arg Lys Gln Glu Glu Ser Val Gln Lys Gln 45 40 35 Glu Ala Met Arg Arg Ala Thr Val Glu Arg Glu Met Glu Leu Arg His 60 50 55 Lys Asn Glu Met Leu Arg Val Glu Thr Glu Ala Arg Ala Arg Ala Lys 70 75 80 65 Ala Glu Arg Glu Asn Ala Asp Ile Ile Arg Glu Gln Ile Arg Leu Lys 95 90 85 Ala Ser Glu His Arg Gln Thr Val Leu Glu Ser Ile Arg Thr Ala Gly 110 100 105 Thr Leu Phe Gly Glu Gly Phe Arg Ala Phe Val Thr Asp Arg Asp Lys 120 125 115 Val Thr Ala Thr Val Asn Ile Phe Ile Lys Gln Gly Trp Gln Val Ala 130 135 140 Glu Arg Gln His Val Gly Ala Ser Trp Ser Pro Arg Ser Cys Pro Cys 160 155 145 150 Arg Leu Cys Thr Ala Leu 165

<210> 3565

<211> 313

<212> PRT

<213> Homo sapiens

<400> 3565

Met Ala Ala Ile Gly Arg Gly Arg Ser Leu Lys Asn Leu Arg Val Arg

1 5 10 15

Glu Pro Ser Asp Asn Leu Arg Glu Ile Leu Gln Asn Val Ala Arg Leu

			20					25					30		
Gln	Gly	Val	Ser	Asn	Met	Arg	Lys	Leu	Gly	His	Leu	Asn	Asn	Phe	Thr
		35					40					45			
Lys	Leu	Leu	Cys	Asp	Ile	Gly	His	Ser	Glu	Glu	Lys	Leu	Gly	Phe	His
	50					55					60				
Tyr	Glu	Asp	Ile	Ile	Ile	Cys	Leu	Arg	Leu	Ala	Leu	Leu	Asn	Glu	Ala
65					70					75					80
Lys	Glu	Val	Arg	Ala	Ala	Gly	Leu	Arg	Ala	Leu	Arg	Tyr	Leu	Ile	Gln
				85					90					95	
Asp	Ser	Ser	Ile	Leu	Gln	Lys	Val	Leu	Lys	Leu	Lys	Val	Asp	Tyr	Leu
			100					105					110		
Ile	Ala	Arg	Cys	Ile	Asp	Ile	Gln	Gln	Ser	Asn	Glu	Val	Glu	Arg	Thr
		115					120					125			
Gln	Ala	Leu	Arg	Leu	Val	Arg	Lys	Met	Ile	Thr	Val	Asn	Ala	Ser	Leu
	130			-		135					140				
Phe	Pro	Ser	Ser	Val	Thr	Asn	Ser	Leu	Ile	Ala	Val	Gly	Asn	Asp	Gly
145		•			150					155					160
Leu	Gln	Glu	Arg	Asp	Arg	Met	Val	Arg	Ala	Cys	Ile	Ala	Ile	Ile	Cys
				165					170					175	
Glu	Leu	Ala	Leu	Gln	Asn	Pro	Glu	Val	Val	Ala	Leu	Arg	Gly	Gly	Leu
			180					185					190		
Asn	Thr	Ile	Leu	Lys	Asn	Val	Ile	Asp	Cys	Gln	Leu	Ser	Arg	Ile	Asn
		195					200					205			
Glu	Ala	Leu	Ile	Thr	Thr	Ile	Leu	His	Leu	Leu	Asn	His	Pro	Lys	Thr
	210					215					220				
Arg	Gln	Tyr	Val	Arg	Ala	Asp	Val	Glu	Leu	Glu	Arg	Ile	Leu	Ala	Pro
225					230					235					240
Tyr	Thr	Asp	Phe	His	Tyr	Arg	His	Ser	Pro	Asp	Thr	Ala	Glu	Gly	Gln
				245					250					255	

 Leu Lys Glu Asp Glu Asp Glu Ala Arg Phe Leu Ala Ser Lys Met Gly Ile

 260
 265
 265
 270
 270

 Ile Ala Thr Phe Arg Ser Trp Ala Gly Ile Ile Asn Leu Cys Lys Pro
 280
 285
 285

 Gly Asn Ser Gly Ile Gln Ser Leu Ile Gly Val Leu Cys Ile Pro Asn
 290
 295
 300

 Met Glu Ile Arg Val Gly Lys Ser Tyr
 310
 310

<210> 3566

<211> 294

<212> PRT

<213> Homo sapiens

20

<400> 3566

Met Ser Pro Tyr Leu Gly Leu Pro Trp Gly Thr Glu Thr Val Val Trp

1 5 10 15

Gln Pro Gln Pro Ser Gln Gly Leu Ile Leu Leu Ser Ser Cys Pro Trp

25

Glu Ala Ser Ala Cys His Phe Pro Glu Ile Ala Glu Val Cys Pro Ala 35 40 45

Tyr His Leu Pro Val Gln Leu Gly Gly Gly Pro Gly His His Phe Leu 50 55 60

Gln Ser Trp Ala Pro Ser Leu Arg Ala Phe Pro Ala Ser Gln Glu 65 70 75 80

Arg Gln Glu Leu Gly Glu His Arg Asn Leu Gly Glu Glu Gly Ser Ala 85 90 95

Gly His Pro Gln Ala Gly Gly Gln Gly Leu Pro Leu Glu Ala Leu Glu

30

Glu Gly Ile Cys Leu Trp Glu Pro Arg Gly Cys Arg Glu Glu Glu Glu Gly Gly Ile Trp Cys Glu Arg Cys Pro Cys Asp Ile Trp Asp His Thr Gly Gly Leu Pro Tyr Ser Leu Thr Lys Pro Leu Phe Pro Ala Leu Pro Pro Ser Leu Asp Glu Gly Thr Glu Val Glu Glu Thr Lys Glu Ala Ala Ala Arg Thr Val Leu Ser Leu Gly Ala Glu Thr Ala Trp Gln Ser Pro Thr Gln Pro Trp Pro Asp Ala Gly Pro Arg Pro Ser Phe Leu Gly Cys Gln Met Thr Val Ser Trp Thr Ser Asp Ala Pro Pro Ala Leu Pro Val Ala Asn Val Met Leu Pro Asp Gly Val Glu Lys Leu Gly Asp Trp Asp Lys Gln Lys Ala Ala Asn Asn Pro Glu Ala His Pro Gln Lys Thr Gly Glu Met Ile Glu Glu Cys Met Gly Thr Val Ala Leu Cys Ser Ile Thr Asn Thr Ser Gln Lys Gln Arg Gly Met Lys Lys Gln Asp Ser Ser Tyr Ser Met Met Pro Phe Leu

<210> 3567

<211> 682

<212> PRT

<213> Homo sapiens

<400> 3567

Met Glu Ser Leu Thr Leu Glu Asp Val Ala Val Asp Phe Thr Trp Glu

1 5 10 15

Glu Trp Gln Phe Leu Ser Pro Ala Gln Lys Asp Leu Tyr Arg Asp Val

20 25 30

Met Leu Glu Asn Tyr Ser Asn Leu Val Ala Val Gly Tyr Gln Ala Ser

35 40 45

Lys Pro Asp Ala Leu Ser Lys Leu Glu Arg Gly Glu Glu Thr Cys Thr

50 55 60

Thr Glu Asp Glu Ile Tyr Ser Arg Ile Cys Ser Asp Ser Gly Gly Ala

65 70 75 80

Ser Gly Gly Ala Tyr Ala Glu Ile Arg Lys Ile Asp Asp Pro Leu Gln

85 90 95

His His Leu Gln Asn Gln Ser Ile Gln Lys Ser Val Lys Gln Cys His

100 105 110

Glu Gln Asn Met Phe Gly Asn Ile Val Asn Gln Asn Lys Gly His Phe

115 120 125

Leu Leu Lys Gln Asp Cys Asp Met Phe Asp Leu His Glu Lys Pro Leu

130 135 140

Lys Ser Asn Leu Ser Phe Glu Asn Gln Lys Arg Ser Ser Gly Leu Lys

145 150 155 160

Asn Ser Ala Glu Phe Asn Arg Asp Gly Lys Ser Leu Phe His Ala Asn

165 170 175

His Lys Gln Phe Tyr Thr Glu Met Lys Phe Pro Ala Ile Ala Lys Pro

180 185 190

Ile Asn Lys Ser Gln Phe Ile Lys Gln Gln Arg Thr His Asn Ile Glu

		195					200					205			
Asn	Ala	His	Val	Cys	Ser	Glu	Cys	Gly	Lys	Ala	Phe	Leu	Lys	Leu	Ser
	210					215					220				
Gln	Phe	Ile	Asp	His	Gln	Arg	Val	His	Thr	Gly	Glu	Lys	Pro	His	Val
225					230					235					240
Cys	Ser	Met	Cys	Gly	Lys	Ala	Phe	Ser	Arg	Lys	Ser	Arg	Leu	Met	Asp
				245					250					255	
His	Gln	Arg	Thr	His	Thr	Glu	Leu	Lys	His	Tyr	Glu	Cys	Thr	Glu	Cys
			260					265					270		
Asp	Lys	Thr	Phe	Leu	Lys	Lys	Ser	Gln	Leu	Asn	Ile	His	Gln	Lys	Thr
		275					280					285			
His	Met	Gly	Gly	Lys	Pro	Tyr	Thr	Cys	Ser	Gln	Cys	Gly	Lys	Ala	Phe
	290					295					300				
Ile	Lys	Lys	Cys	Arg	Leu	Ile	Tyr	His	Gln	Arg	Thr	His	Thr	Gly	Glu
305					310					315				•	320
Lys	Pro	His	Gly	Cys	Ser	Val	Cys	Gly	Lys	Ala	Phe	Ser	Thr	Lys	Phe
				325					330					335	
Ser	Leu	Thr	Thr	His	Gln	Lys	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ile
			340					345					350		
Cys	Ser	Glu	Cys	Gly	Lys	Gly	Phe	Ile	Glu	Lys	Arg	Arg	Leu	Ile	Ala
		355					360					365			
His	His	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Phe	Ile	Cys	Asn	Lys	Cys
	370					375					380				
Gly	Lys	Gly	Phe	Thr	Leu	Lys	Asn	Ser	Leu	Ile	Thr	His	Gln	Gln	Thr
385					390					395					400
His	Thr	Gly	Glu	Lys	Leu	Tyr	Thr	Cys	Ser	Glu	Cys	Gly	Lys	Gly	Phe
				405					410					415	
Ser	Met	Lys	His	Cys	Leu	Met	Val	His	Gln	Arg	Thr	His	Thr	Gly	Glu
			120					425				•	430		

Lys	Pro	Tyr	Lys	Cys	Asn	Glu	Cys	Gly	Lys	Gly	Phe	Ala	Leu	Lys	Ser
		435					440					445			
Pro	Leu	Ile	Arg	His	Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Val
	450					455					460				
Cys	Thr	Glu	Cys	Arg	Lys	Gly	Phe	Thr	Met	Lys	Ser	Asp	Leu	Ile	Val
465					470					475					480
His	Gln	Arg	Thr	His	Thr	Ala	Glu	Lys	Pro	Tyr	Ile	Cys	Asn	Asp	Cys
				485					490					495	
Gly	Lys	Gly	Phe	Thr	Val	Lys	Ser	Arg	Leu	Ile	Val	His	Gln	Arg	Thr
			500					505					510		
His	Thr	Gly	Glu	Lys	Pro	Tyr	Val	Cys	Gly	Glu	Cys	Gly	Lys	Gly	Phe
		515					520					525			
Pro	Ala	Lys	Ile	Arg	Leu	Met	Gly	His	Gln	Arg	Thr	His	Thr	Gly	Glu
	530					535					540				
Lys	Pro	Tyr	Ile	Cys	Asn	Glu	Cys	Gly	Lys	Gly	Phe	Thr	Met	Lys	Ser
545					550					555					560
Thr	Leu	Ser	Ile	His	Gln	Gln	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys
				565					570					575	
Cys	Asn	Glu	Cys	Asp	Lys	Thr	Phe	Arg	Lys	Lys	Thr	Cys	Leu	Ile	Gln
			580					585					590		
His	Gln	Arg	Phe	His	Thr	Gly	Lys	Thr	Ser	Phe	Ala	Cys	Thr	Glu	Cys
		595					600					605			
Gly	Lys	Phe	Ser	Leu	Arg	Lys	Asn	Asp	Leu	Ile	Thr	His	Gln	Arg	Ile
	610					615					620				
His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Ser	Asp	Cys	Gly	Lys	Ala	Phe
625					630					635					640
Thr	Thr	Lys	Ser	Gly	Leu	Asn	Val	His	Gln	Arg	Lys	His	Thr	Gly	Glu
				645					650					655	
Arg	Pro	Tvr	Glv	Cvs	Ser	Asp	Cvs	Glv	Lvs	Ala	Phe	Ala	His	Leu	Ser

660 665 670

Ile Leu Val Lys His Lys Arg Ile His Arg
675 680

<210> 3568

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3568

Met Gly Gln Glu Gly Ala Phe Pro Arg Ile Ser Gly Ser Thr Val Phe
1 5 10 15

Ser Leu Asp Gln Asn Gly Ile Thr Val Tyr Phe Asp Trp Ser Val Ser
20 25 30

Gly Phe Arg Leu Ser Leu Gly Trp Ala Ser Gly Ser Gly Arg Lys Asp

35 40 45

Leu Gly Ser Gly Val Ser Leu Gly Arg Gly Gly Ala Gly Pro Pro Ala
50 55 60

Gly Ser Pro Ala Pro Ser Val Gly Leu Pro Ser Thr Thr Gly Phe Ala 65 70 75 80

Glu Ala Pro Ala Pro Pro Ser Arg Arg Ala Arg Pro Gln His Trp Ser 85 90 95

Leu Ser Ser Val Phe Arg Ala Thr Gly Pro Trp Ala Ala Thr Thr Gly
100 105 110

Ala Ser

<210> 3569

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3569

Met Ala Leu Ala Asp Ser Thr Arg Gly Leu Pro Asn Gly Gly Gly

1 5 10 15

Gly Gly Gly Ser Gly Ser Ser Ser Ser Ser Ala Glu Pro Pro Leu Phe

20 25 30

Pro Asp Ile Val Glu Leu Asn Val Gly Ser Gln Val Tyr Val Thr Arg

35 40 45

Arg Cys Thr Val Val Ser Val Pro Asp Ser Leu Leu Trp Arg Met Phe

50 55 60

Thr Gln Gln Gln Pro Gln Glu Leu Ala Arg Asp Ser Lys Gly Arg Phe

65 70 75 80

Phe Leu Asp Arg Asp Gly Phe Leu Phe Arg Tyr Ile Leu Asp Tyr Leu

85 90 95

Arg Asp Leu Gln Leu Val Leu Pro Asp Tyr Phe Pro Glu Arg Ser Arg

100 105 110

Leu Gln Arg Glu Ala Glu Tyr Phe Glu Leu Pro Glu Leu Val Arg Arg

115 120 125

Leu Gly Ala Pro Gln Gln Pro Gly Pro Gly Pro Pro Pro Ser Arg Arg

130 135 140

Gly Val His Lys Glu Gly Ser Leu Gly Asp Glu Leu Leu Pro Leu Gly

145 150 155 160

Tyr Ser Glu Pro Glu Gln Gln Glu Gly Ala Ser Ala Gly Ala Pro Ser

165 170 175

Pro Thr Leu Glu Leu Ala Ser Arg Ser Pro Ser Gly Gly Ala Ala Gly

Pro Leu Leu Thr Pro Ser Gln Ser Leu Asp Gly Ser Arg Arg Ser Gly Tyr Ile Thr Ile Gly Tyr Arg Gly Ser Tyr Thr Ile Gly Arg Asp Ala Gln Ala Asp Ala Lys Phe Arg Arg Val Ala Arg Ile Thr Val Cys Gly Lys Thr Ser Leu Ala Lys Glu Val Phe Gly Asp Thr Leu Asn Glu Ser Arg Asp Pro Asp Arg Pro Pro Glu Arg Tyr Thr Ser Arg Tyr Tyr Leu Lys Phe Asn Phe Leu Glu Gln Ala Phe Asp Lys Leu Ser Glu Ser Gly Phe His Met Val Ala Cys Ser Ser Thr Gly Thr Cys Ala Phe Ala Ser Ser Thr Asp Gln Ser Glu Asp Lys Ile Trp Thr Ser Tyr Thr Glu Tyr Val Phe Cys Arg Glu

<210> 3570

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3570

Met Thr Cys Ala Lys Cys Asn His Gly Phe Cys Trp Arg Cys Leu Lys

1 5 10 15

Ser Trp Lys Pro Asn His Lys Asp Tyr Tyr Asn Cys Ser Ala Met Val 20 25 30 Arg Arg Trp Ala Leu Gly Glu Gly Arg Gly Pro Glu Pro Ser Gly Arg 35 40 45 Gly Ala Ala Thr Arg Ser Trp Ala Asp Arg Ala Pro Cys Ala Val Gln 50 55 60 His Ser Ser Cys Trp Asp Arg Gly Ser Leu Trp Gly Arg Gln Ser His 80 70 75 65 Leu Gly Leu Gln Met Leu Glu Ser Leu Phe Thr Gly Thr Phe Ser Ser 85 90 95 Arg Thr Gly Leu Leu Ile Pro Arg Trp Leu Gln Lys Gly Trp Gly Gly 100 105 110 Leu Gly Thr Leu Arg Arg Gln Gln Gly Arg Ala Gly Lys Ser Arg Asp 120 125 115 Pro Ala Phe Arg Ala Trp Leu Cys Cys Leu Ala Cys Gly Phe Glu Gln

Val His Leu Leu Gln Ala Ser Thr Ala Ser Ala Lys Gly Val Asn
145
150
155
160

Asn Met Thr Tyr Ser Thr Gln Ser

165

<210> 3571

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3571

Met Ile Ser Phe Asp Ser Met Ser His Ile Trp Val Thr Leu Met Gln

Glu Val Gly Ser His Gly Leu Glu Gln Leu His Pro Ser Gly Phe Ala Gly Tyr Ser Leu Leu Pro Gly Cys Phe His Arg Leu Ala Leu Ser Ile Cys Ser Phe Ser Arg Cys Thr Val Gln Ala Val Gly Gly Ser Thr Ile Leu Gly Phe Gly Arg Trp Trp Ser Ser Ser Tyr Ser Ser Thr Arg Gln Cys Cys Ile Arg Asp Ser Val Trp Gly Leu Leu Pro His Thr Ser Leu Leu His Cys Pro Ser Thr Gly Thr Pro

<210> 3572

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3572

Met Lys Gly Ser Leu Met Ala Thr Ile Ser Ile Val Leu Glu Leu Lys

Ala Ala Leu Val Thr Arg His Pro Ile Cys Pro Asn Leu Phe Thr Pro .

Ala Phe Ala Phe Pro Leu Val Pro Gln Gly Arg Asn Trp Cys Cys Met

Arg Arg Cys Ser Cys Gln Ser Asn Arg Arg Ser Arg Glu Pro Ala Ile

 Ala Ser Asp Ser Ile Thr Gly Ala Gly Leu Ser Val Ile Ala Trp Asp 70 75 80 65 Gly Lys Tyr Ser Phe Cys Phe Trp Arg Lys Tyr Phe Thr His Glu Asp 85 90 95 Gln Asp Gln Leu Ile Arg Thr Gly Arg Asn Lys Gly Thr Met Cys Gly 100 105 110 Ser Gly Ser Phe Phe Phe Leu Arg Glu Gly Leu Ala Leu Ser Pro 120 125 115 Met Leu Lys Cys His Cys Ala Asn Thr Ser Leu Tyr Ser Leu Asn Leu 130 135 140 Leu Gly Ser Ser Asn Pro Pro Ala Ser Asp Ser Gln Val Ala Gly Thr 145 150 155 160 Ile Val Ala Cys His His Ala Trp Leu Ile Phe Asn Phe Leu 165 170

<210> 3573

<211> 575

<212> PRT

<213> Homo sapiens

35

<400> 3573

Met Arg Ile Leu Val Ile Gly Leu Ser Arg Glu Leu Pro Leu Gly Pro

1 5 10 15

Ala Asp Ala Met Glu Leu Ala Asp His Leu Val Lys Arg Ala Ala Ala

20 25 30

Val Gln Ala Asp Asp Val Glu Val Leu Lys Val Gly Arg Thr Gln Leu

Ile Asp Ala Val Leu Asn Leu Cys Thr Tyr His His Pro Glu Asn Ile

40

45

	50					55					60				
Gln	Leu	Pro	Pro	Gly	Tyr	Gln	Pro	Pro	Asn	Leu	Ala	Ile	Ser	Thr	Leu
65					70					75					80
Tyr	Trp	Lys	Ala	Trp	Pro	Leu	Leu	Leu	Val	Val	Ala	Ala	Phe	Asn	Pro
				85					90					95	
Glu	Asn	Ile	Gly	Leu	Ala	Ala	Trp	Glu	Glu	Tyr	Pro	Thr	Leu	Lys	Met
			100					105					110		
Leu	Met	Glu	Met	Val	Met	Thr	Asn	Asn	Tyr	Ser	Tyr	Pro	Pro	Cys	Thr
		115					120					125			
Leu	Thr	Asp	Glu	Glu	Thr	Arg	Thr	Glu	Met	Leu	Asn	Arg	Glu	Leu	Gln
	130					135					140				
Thr	Ala	Gln	Arg	Glu	Lys	Gln	Glu	Ile	Leu	Ala	Phe	Glu	Gly	His	Leu
145					150					155					160
Ala	Ala	Ala	Ser	Thr	Lys	Gln	Thr	Ile	Thr	Glu	Ser	Ser	Ser	Leu	Leu
				165					170					175	
Leu	Ser	Gln	Leu	Thr	Ser	Leu	Asp	Pro	Gln	Gly	Pro	Pro	Arg	Arg	Pro
			180					185					190		
Pro	Pro	His	Ile	Leu	Asp	Gln	Val	Lys	Ser	Leu	Asn	Gln	Ser	Leu	Arg
		195					200					205			
Leu	Gly	His	Leu	Leu	Cys	Arg	Ser	Arg	Asn	Pro	Asp	Phe	Leu	Leu	His
	210					215					220				
Ile	Ile	Gln	Arg	Gln	Ala	Ser	Ser	Gln	Ser	Met	Pro	Trp	Leu	Ala	Asp
225					230					235					240
Leu	Val	Gln	Ser	Ser	Glu	Gly	Ser	Leu	Asp	Val	Leu	Pro	Val	Gln	Cys
				245					250					255	
Leu	Cys	Glu	Phe	Leu	Leu	His	Asp	Ala	Val	Asp	Asp	Ala	Ala	Ser	Gly
			260					265					270		
Glu	Glu	Asp	Asp	Glu	Gly	Glu	Ser	Lys	Glu	Gln	Lys	Ala	Lys	Lys	Arg
		275					280					285			

Gln	Arg	Gln	Gln	Lys	Gln	Arg	Gln	Leu	Leu	Gly	Arg	Leu	Gln	Asp	Leu
	290					295					300				
Leu	Leu	Gly	Pro	Lys	Ala	Asp	Glu	Gln	Thr	Thr	Cys	Glu	Val	Leu	Asp
305					310					315					320
Tyr	Phe	Leu	Arg	Arg	Leu	Gly	Ser	Ser	Gln	Val	Ala	Ser	Arg	Val	Leu
				325					330					335	
Ala	Met	Lys	Gly	Leu	Ser	Leu	Val	Leu	Ser	Glu	Gly	Ser	Leu	Arg	Asp
			340					345					350		
Gly	Glu	Glu	Lys	Glu	Pro	Pro	Met	Glu	Glu	Asp	Val	Gly	Asp	Thr	Asp
		355					360					365			
Val	Leu	Gln	Gly	Tyr	Gln	Trp	Leu	Leu	Arg	Asp	Leu	Pro	Arg	Leu	Pro
	370					375					380				
Leu	Phe	Asp	Ser	Val	Arg	Ser	Thr	Thr	Ala	Leu	Ala	Leu	Gln	Gln	Ala
385					390					395					400
Ile	His	Met	Glu	Thr	Asp	Pro	His	Thr	Ile	Ser	Ala	Tyr	Leu	Ile	Tyr
				405					410					415	
Leu	Ser	Gln	His	Thr	Pro	Val	Glu	Glu	Gln	Ala	Gln	His	Ser	Asp	Leu
			420					425					430		
Ala	Leu	Asp	Val	Ala	Arg	Leu	Val	Val	Glu	Arg	Ser	Thr	Ile	Met	Ser
		435					440					445			
His	Leu	Phe	Ser	Lys	Leu	Ser	Pro	Ser	Ala	Ala	Ser	Asp	Ala	Val	Leu
	450					455					460				
Ser	Ala	Leu	Leu	Ser	Ile	Phe	Ser	Arg	Tyr	Val	Arg	Arg	Met	Arg	Gln
465					470					475					480
Ser	Lys	Glu	Gly	Glu	Glu	Val	Tyr	Ser	Trp	Ser	Glu	Ser	Gln	Asp	Gln
				485					490					495	
Val	Phe	Leu	Arg	Trp	Ser	Ser	Gly	Glu	Thr	Ala	Thr	Met	His	Ile	Leu
			500					505					510		
Val	Val	His	Ala	Met	Val	Ile	Leu	Leu	Thr	Leu	Glv	Pro	Pro	Arg	Glv

515 520 525 Glu Pro Pro Gln Ala Pro Gly Gly Ala Ala Ser Cys Gln Val Gly His 530 535 540 Ser Pro Asp His Thr Gln Arg Leu Pro His Pro Cys Leu Ala Ser Gly 550 555 560 545 Arg Glu Ala Pro Gln Pro Phe Asn Pro Val Ser Trp Leu Leu Ser 565 570 575

<210> 3574

<211> 295

<212> PRT

<213> Homo sapiens

<400> 3574

Met Pro Ser Pro Arg Arg Ser Met Glu Gly Arg Pro Leu Gly Val Ser

1 5 10 15

Ala Ser Ser Ser Ser Ser Pro Gly Ser Pro Ala His Gly Gly

20 25 30

Gly Gly Ser Arg Phe Glu Phe Gln Ser Leu Leu Ser Ser Arg Ala
35 40 45

Thr Ala Val Asp Pro Thr Cys Ala Arg Leu Arg Ala Ser Glu Ser Pro 50 55 60

Val His Arg Arg Gly Ser Phe Pro Leu Ala Ala Ala Gly Pro Ser Gln
65 70 75 80

Ser Pro Ala Pro Pro Leu Pro Glu Glu Asp Arg Met Asp Leu Asn Pro 85 90 95

Ser Phe Leu Gly Ile Ala Leu Arg Ser Leu Leu Ala Ile Asp Leu Trp 100 105 110

Leu	Ser	Lys	Lys	Leu	Gly	Val	Cys	Ala	Gly	Glu	Ser	Ser	Ser	Trp	Gly
		115					120					125			
Ser	Val	Arg	Pro	Leu	Met	Lys	Leu	Leu	Glu	Ile	Ser	Gly	His	Gly	Ile
	130					135					140				
Pro	Trp	Leu	Leu	Gly	Thr	Leu	Tyr	Cys	Leu	Cys	Arg	Ser	Asp	Ser	Trp
145					150					155					160
Ala	Gly	Arg	Glu	Val	Leu	Met	Asn	Leu	Leu	Phe	Ala	Leu	Leu	Leu	Asp
				165					170					175	
Leu	Leu	Leu	Val	Ala	Leu	Ile	Lys	Gly	Leu	Val	Arg	Arg	Arg	Arg	Pro
			180					185					190		
Ala	His	Asn	Gln	Met	Asp	Met	Phe	Val	Thr	Leu	Ser	Val	Asp	Lys	Tyr
		195					200					205			
Ser	Phe	Pro	Ser	Gly	His	Ala	Thr	Arg	Ala	Ala	Leu	Met	Ser	Arg	Phe
	210					215					220				
Ile	Leu	Asn	His	Leu	Val	Leu	Ala	Ile	Pro	Leu	Arg	Val	Leu	Val	Val
225					230					235					240
Leu	Trp	Ala	Phe	Val	Leu	Gly	Leu	Ser	Arg	Val	Met	Leu	Gly	Arg	His
				245					250					255	
Asn	Val	Thr	Asp	Val	Ala	Phe	Gly	Phe	Phe	Leu	Gly	Tyr	Met	Gln	Tyr
			260					265					270		
Ser	Ile	Val	Asp	Tyr	Cys	Trp	Leu	Ser	Pro	His	Asn	Ala	Pro	Val	Leu
		275					280					285			
Phe	Leu	Leu	Trp	Ser	Gln	Arg									
	290					295									

<210> 3575

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3575

Met Leu Leu Glu Pro Gly Arg Gly Cys Cys Ala Leu Ala Ile Leu Leu

1 5 10 15

Ala Ile Val Asp Ile Gln Ser Gly Glu Thr Gly Asn Tyr Thr Val Thr

20 25 30

Gly Leu Lys Gln Arg Gln His Leu Glu Phe Ser His Asn Glu Gly Thr

35 40 45

Leu Ser Ser Gly Phe Leu Gln Glu Lys Val Trp Val Met Leu Val Thr

50 55 60

Ser Leu Val Ala Leu Gln Gly Met Ser Lys Arg Ala Val Ser Thr Pro

65 70 75 80

Ser Asn Glu Gly Ala Ile Ile Phe Leu Pro Pro Trp Leu Phe Ser Arg

85 90 95

Arg Arg Arg Leu Glu Arg Met Ser Arg Gly Arg Glu Lys Cys Tyr Ser

100 105 110

Ser Pro Gly Tyr Pro Gln Glu Ser Ser Asn Gln Phe His

115 120 125

<210> 3576

<211> 596

<212> PRT

<213> Homo sapiens

<400> 3576

Met Gly Arg Thr Ala Leu Glu Gln Gln Ser Thr Leu Leu Leu Phe Gln

1 5 10 15

Gln	Gly	Trp	Asn	Ile	Thr	Val	Asp	Leu	Val	Ile	Gly	Pro	Lys	Gly	Ile
			20					25					30		
Arg	Gln	Leu	Thr	Ser	Gln	Asp	Ala	Lys	Pro	Thr	Cys	Leu	Ala	Glu	Phe
		35					40					45			
Lys	Gln	Ile	Arg	Ser	Ile	Arg	Cys	Leu	Pro	Leu	Glu	Glu	Gly	Gln	Ala
	50					55					60				
Val	Leu	Gln	Leu	Gly	Ile	Glu	Gly	Ala	Pro	Gln	Ala	Leu	Ser	Ile	Lys
65					70					75					80
Thr	Ser	Ser	Leu	Ala	Glu	Ala	Glu	Asn	Met	Ala	Asp	Leu	Ile	Asp	Gly
				85					90					95	
Tyr	Cys	Arg	Leu	Gln	Gly	Glu	His	Gln	Gly	Ser	Leu	Ile	Ile	His	Pro
			100					105					110		
Arg	Lys	Asp	Gly	Glu	Lys	Arg	Asn	Ser	Leu	Pro	Gln	Ile	Pro	Met	Leu
		115					120					125			
Asn	Leu	Glu	Ala	Arg	Arg	Ser	His	Leu	Ser	Glu	Ser	Cys	Ser	Ile	Glu
	130					135					140				
Ser	Asp	Ile	Tyr	Ala	Glu	Ile	Pro	Asp	Glu	Thr	Leu	Arg	Arg	Pro	Gly
145					150					155					160
Gly	Pro	Gln	Tyr	Gly	Ile	Ala	Arg	Glu	Asp	Val	Val	Leu	Asn	Arg	Ile
				165					170					175	
Leu	Gly	Glu	Gly	Phe	Phe	Gly	Glu	Val	Tyr	Glu	Gly	Val	Tyr	Thr	Asn
			180					185					190		
His	Lys	Gly	Glu	Lys	Ile	Asn	Val	Ala	Val	Lys	Thr	Cys	Lys	Lys	Asp
		195					200					205			
Cys	Thr	Leu	Asp	Asn	Lys	Glu	Lys	Phe	Met	Ser	Glu	Ala	Val	Ile	Met
	210					215					220				
Lys	Asn	Leu	Asp	His	Pro	His	Ile	Val	Lys	Leu	Ile	Gly	Ile	Ile	Glu
225					230					235					240
Glu	Glu	Pro	Thr	Trp	He	He	Met	Glu	Leu	Tvr	Pro	Tvr	Glv	Glu	Leu

				245					250					255	
Gly	His	Tyr	Leu	Glu	Arg	Asn	Lys	Asn	Ser	Leu	Lys	Val	Leu	Thr	Leu
			260					265					270		
Val	Leu	Tyr	Ser	Leu	Gln	Ile	Cys	Lys	Ala	Met	Ala	Tyr	Leu	Glu	Ser
		275					280					285			
Ile	Asn	Cys	Val	His	Arg	Asp	Ile	Ala	Val	Arg	Asn	Ile	Leu	Val	Ala
	290					295					300				
Ser	Pro	Glu	Cys	Val	Lys	Leu	Gly	Asp	Phe	Gly	Leu	Ser	Arg	Tyr	Ile
305					310					315					320
Glu	Asp	Glu	Asp	Tyr	Tyr	Lys	Ala	Ser	Val	Thr	Arg	Leu	Pro	Ile	Lys
				325					330					335	
Trp	Met	Ser	Pro	Glu	Ser	Ile	Asn	Phe	Arg	Arg	Phe	Thr	Thr	Ala	Ser
			340					345					350		
Asp	Val	Trp	Met	Phe	Ala	Val	Cys	Met	Trp	Glu	Ile	Leu	Ser	Phe	Gly
		355					360					365			
Lys	Gln	Pro	Phe	Phe	Trp	Leu	Glu	Asn	Lys	Asp	Val	Ile	Gly	Val	Leu
	370					375					380				
Glu	Lys	Gly	Asp	Arg	Leu	Pro	Lys	Pro	Asp	Leu	Cys	Pro	Pro	Val	Leu
385					390					395					400
Tyr	Thr	Leu	Met	Thr	Arg	Cys	Trp	Asp	Tyr	Asp	Pro	Ser	Asp	Arg	Pro
				405					410					415	
Arg	Phe	Thr	Glu	Leu	Val	Cys	Ser	Leu	Ser	Asp	Val	Tyr	Gln	Met	Glu
			420					425					430		
Lys	Asp	Ile	Ala	Met	Glu	Gln	Glu	Arg	Asn	Ala	Arg	Tyr	Arg	Thr	Pro
		435					440					445			
Lys	Ile	Leu	Glu	Pro	Thr	Ala	Phe	Gln	Glu	Pro	Pro	Pro	Lys	Pro	Ser
	450					455					460				
Arg	Pro	Lys	Tyr	Arg	Pro	Pro	Pro	Gln	Thr	Asn	Leu	Leu	Ala	Pro	Lys
465					470					475					480

Leu Gln Ser Gln Glu Glu Asp Phe Ile Gln Pro Ser Ser Arg Glu Glu 485 490 495 Ala Gln Gln Leu Trp Glu Ala Glu Lys Val Lys Met Arg Gln Ile Leu 500 505 510 Asp Lys Gln Gln Lys Gln Met Val Glu Asp Tyr Gln Trp Leu Arg Gln 520 525 515 Glu Glu Lys Ser Leu Asp Pro Met Val Tyr Met Asn Asp Thr Ser Pro 540 530 535 Leu Thr Pro Glu Lys Glu Val Gly Tyr Arg Glu Cys Ser Arg Pro Ser 560 545 550 555 Ser Gly Gly Phe Leu Leu Ala Pro Cys Ala Glu Pro Pro Ser Leu Pro 565 570 575 Thr Ala Gln Gly Arg Glu Gln Arg Ser Leu Ser Ala Phe Pro Ala Ala 580 585 590 Ser Ala Met Ile 595

<210> 3577

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3577

Met Pro Glu Gly Pro Glu Leu His Leu Ala Ser Gln Phe Val Asn Glu

1 5 10 15

Ala Cys Arg Ala Leu Val Phe Gly Gly Cys Val Glu Lys Ser Ser Val

20 25 30

Ser Arg Asn Pro Glu Val Pro Phe Glu Ser Ser Ala Tyr Arg Ile Ser

ページ:3510/

Ala Ser Ala Arg Gly Lys Glu Leu Arg Leu Ile Leu Ser Pro Leu Pro Gly Ala Gln Pro Gln Gln Glu Pro Leu Ala Pro Arg Gly Ala Ala Thr Pro Cys Pro Pro Ala Leu Leu His Gly Pro Ala Trp Pro Pro Ala Arg Pro Met Phe Arg Gly His Pro Pro Val Arg Pro Leu Gly Pro Trp Gly Lys Val Ala Ala Gly Pro Arg Ala Leu Cys Leu Ala Gly Val Pro Ala Val Gln Gly Glu Cys Ala Thr Lys Pro Ser Gly <210> 3578 <211> 117 <212> PRT <213> Homo sapiens <400> 3578 Met Pro Ser Arg Gln Leu Glu Asp Pro Gly Ala Gly Thr Pro Ser Pro

Leu Cys Gln Glu Glu Asn Glu Asp Met Val Pro Asp Ala Leu Gln Gln 50 55 60

Val Arg Leu His Ala Leu Ala Gly Phe Gln Gln Arg Ala Leu Cys His

Ala Leu Thr Phe Pro Ser Leu Gln Arg Leu Val Tyr Ser Met Cys Ser

Asn Pro Gly Ala Phe Arg Leu Ala Pro Ala Leu Pro Ala Arg Pro His Arg Gly Leu Ser Thr Phe Pro Gly Ala Glu His Cys Leu Arg Ala Ser Pro Lys Thr Thr Leu Ser Gly Gly Phe Phe Val Ala Val Ile Glu Arg Val Glu Met Pro Thr <210> 3579 <211> 140 <212> PRT <213> Homo sapiens <400> 3579 Met Ala Glu Gln Gly Val Glu His Leu Lys Ser Val Phe Cys Gln Cys Pro Ser His Gly Cys Ala Ser Gly Pro Arg His Ser Leu Phe Pro Trp Pro Arg Met Pro Phe Leu Gln Asn Leu His Ser Leu His Phe Leu Gln Val Leu Val Arg Tyr His Leu Ile Arg Glu Val Phe Leu Asp His Leu Ile Tyr Asn His Thr Ser Phe Pro Ser Ser Ser His Thr Cys Trp Pro Leu His Ser Thr Leu Phe Ser Phe Ser Gly Ser Cys Tyr Leu Leu Arg

Tyr Tyr Val Tyr Leu His Asn Ile Thr Phe Val Pro Gly Leu Thr Thr

100 105 110

Leu Thr Ser Gln Asn Met Ser Phe Pro Lys Ala Gly Ala Ala Leu Leu

115 120 125

Thr Ala Phe Leu Ala His Thr Gly Ser Asp Thr Leu

130 135 140

<210> 3580

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3580

Met Lys Trp Lys Ala Leu Phe Thr Ala Ala Ile Leu Gln Ala Gln Leu

1 5 10 15

Pro Ile Thr Glu Ala Gln Ser Phe Gly Leu Leu Asp Pro Lys Leu Cys

20 25 30

Tyr Leu Leu Asp Gly Ile Leu Phe Ile Tyr Gly Val Ile Leu Thr Ala

35 40 45

Leu Phe Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr

50 55 60

Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg

65 70 75 80

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met

85 90 95

Gly Gly Lys Pro Gln Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn

100 105 110

Val Ser Arg Gly Asp Leu Thr Phe Asp Leu Gly Lys Leu Glu Gly

115 120 125

Leu	Glu	Glu	Gly	Ser	Arg	Gly	Arg	Ala	Gly	Gly	Arg	Ala	Gly	Gly	Gly
	130					135					140				
Leu	Gln	Arg	Lys	Gly	Trp	Arg	Lys	Gly	Trp	Arg	Arg	Ala	Pro	Glu	Glu
145					150					155					160
Gly	Leu	Glu	Glu	Gly	Leu	Glu	Glu	Gly	Ser	Gly	Gly	Arg	Ala	Gly	Gly
				165					170					175	
Arg	Ala	Gly	Gly	Gly	Leu	Arg	Arg	Lys	Gly	Trp	Arg	Lys	Gly	Trp	Arg
			180					185					190		
Arg	Ala	Pro	Glu	Glu	Gly	Leu	Glu	Glu	Gly	Leu	Glu	Glu	Gly	Ser	Gly
		195					200					205			
Gly	Arg	Ala	Gly	Gly	Arg	Ala	Gly	Gly	Gly	Leu	Arg	Arg	Arg	Ala	Gly
	210					215					220				
Gly	Arg	Ala	Gly	Gly	Gly	Leu	Arg	Arg	Lys	Gly	Trp	Arg	Lys	Gly	Trp
225					230					235					240
Arg	Arg	Ala	Pro	Glu	Glu	Gly	Leu	Glu	Glu	Gly	Leu	Glu	Glu	Gly	Ser
				245					250					255	
Gly	Gly	Arg	Ala	Gly	Gly	Arg	Ala	Gly	Gly	Gly	Leu	Arg	Arg	Lys	Gly
			260					265					270		
Trp	Arg	Lys	Gly	Trp	Arg	Arg	Ala	Pro	Glu	Glu	Gly	Leu	Glu	Glu	Gly
		275					280					285			
Phe	Gly	Gly	Arg	Ala	Gly	Gly	Arg	Ala	Gly	Gly	Gly	Leu	Gln	Arg	Lys
	290					295					300				
Ala	Val	Ala	Pro	His	Ser	Val	Val	Phe	Val	Cys	Pro	Asp	Leu	Pro	Phe
305					310					315					320
Leu	Asp														

<211> 544

<212> PRT

<213> Homo sapiens

<400> 3581

Met Glu Glu Ile Thr Arg Thr Ile His Ile Gly Pro Ser Arg Leu Gly

1 5 10 15

His Pro Cys Phe Tyr His Gln Lys Asp Ile Lys Leu Glu Asn Leu Ile 20 25 30

Ile Lys Gln Gly Glu Gln Ile Met Leu Asn Ser Val Glu Glu Ile Asp
35 40 45

Gly Glu Ile Met Val Ser Cys Ala Val Ala Arg Asn His Gln Thr His
50 55 60

Ser Phe Asn Leu Pro Leu Ser Gln Glu Gly Glu Phe Tyr Glu Cys Glu 65 70 75 80

Asp Glu Arg Ile Tyr Thr Leu Lys Glu Ile Val Glu Trp Lys Ile Pro

85 90 95

Lys Asn Arg Thr Arg Thr Val Asn Leu Thr Asp Phe Ser Asn Lys Trp

100 105 110

Asp Ser Thr Asn Pro Phe Pro Lys Asp Phe Tyr Gly Thr Leu IIe Leu
115 120 125

Lys Pro Val Tyr Glu Ile Gln Gly Val Met Lys Phe Arg Lys Asp Ile 130 135 140

Ile Arg Ile Leu Pro Ser Leu Asp Val Glu Val Lys Asp Ile Thr Asp 145 150 155 160

Ser Tyr Asp Ala Asn Trp Phe Leu Gln Leu Leu Ser Thr Glu Asp Leu 165 170 175

Phe Glu Met Thr Ser Lys Glu Phe Pro Ile Val Thr Glu Val Ile Glu 180 185 190

Ala	Pro	Glu	Gly	Asn	His	Leu	Pro	Gln	Ser	Ile	Leu	Gln	Pro	Gly	Lys
		195					200					205			
Thr	Ile	Val	Ile	His	Lys	Lys	Tyr	Gln	Ala	Ser	Arg	Ile	Leu	Ala	Ser
	210					215					220				
Glu	Ile	Arg	Ser	Asn	Phe	Pro	Lys	Arg	His	Phe	Leu	Ile	Pro	Thr	Ser
225					230					235					240
Tyr	Lys	Gly	Lys	Phe	Lys	Arg	Arg	Pro	Arg	Glu	Phe	Pro	Thr	Ala	Tyr
				245					250					255	
Asp	Leu	Glu	Ile	Ala	Lys	Ser	Glu	Lys	Glu	Pro	Leu	His	Val	Val	Ala
			260					265					270		
Thr	Lys	Ala	Phe	His	Ser	Pro	His	Asp	Lys	Leu	Ser	Ser	Val	Ser	Val
		275					280					285			
Gly	Asp	Gln	Phe	Leu	Val	His	Gln	Ser	Glu	Thr	Thr	Glu	Val	Leu	Cys
	290					295					300				
Glu	Gly	Ile	Lys	Lys	Val	Val	Asn	Val	Leu	Ala	Cys	Glu	Lys	Ile	Leu
305					310					315					320
Lys	Lys	Ser	Tyr	Glu	Ala	Ala	Leu	Leu	Pro	Leu	Tyr	Met	Glu	Gly	Gly
				325					330					335	
Phe	Val	Glu	Val	Ile	His	Asp	Lys	Lys	Gln	Tyr	Pro	Ile	Ser	Glu	Leu
			340					345					350		
Cys	Lys	Gln	Phe	Arg	Leu	Pro	Phe	Asn	Val	Lys	Val	Ser	Val	Arg	Asp
		355					360					365			
Leu	Ser	Ile	Glu	Glu	Asp	Val	Leu	Ala	Ala	Thr	Pro	Gly	Leu	Gln	Leu
	370					375					380				
Glu	Glu	Asp	Ile	Thr	Asp	Ser	Tyr	Leu	Leu	Ile	Ser	Asp	Phe	Ala	Asn
385					390					395					400
Pro	Thr	Glu	Cys	Trp	Glu	Ile	Pro	Val	Gly	Arg	Leu	Asn	Met	Thr	Val
				405					410					415	
Gln	Leu	Val	Ser	Asn	Phe	Ser	Arg	Asp	Ala	Glu	Pro	Phe	Leu	Val	Arg

Thr Leu Val Glu Glu Ile Thr Glu Glu Gln Tyr Tyr Met Met Arg Arg Tyr Glu Ser Ser Ala Ser His Pro Pro Pro Arg Pro Pro Lys His Pro Ser Val Glu Glu Thr Lys Leu Thr Leu Leu Thr Leu Ala Glu Glu Arg Thr Val Asp Leu Pro Lys Ser Pro Lys Arg His His Val Asp Ile Thr Lys Lys Leu His Pro Asn Gln Ala Gly Leu Asp Ser Lys Val Leu Ile Gly Ser Gln Asn Asp Leu Val Asp Glu Glu Lys Glu Arg Ser Asn Arg Gly Ala Thr Ala Val Ala Glu Thr Phe Lys Asn Glu Lys His Gln Lys

<210> 3582

<211> 903

<212> PRT

<213> Homo sapiens

<400> 3582

Met Asn Lys Ala Pro Gln Ser Thr Gly Pro Pro Pro Ala Pro Ser Pro

1 5 10 15

Gly Leu Pro Gln Pro Ala Phe Pro Pro Gly Gln Thr Ala Pro Val Val

20 25 30

Phe Ser Thr Pro Gln Ala Thr Gln Met Asn Thr Pro Ser Gln Pro Arg

35 40 45

Gln	Gly	Arg	Ser	Thr	Tyr	Val	Val	Pro	Thr	Gln	Gln	Tyr	Pro	Val	Gln	
	50					55					60					
Pro	Gly	Ala	Pro	Gly	Phe	Tyr	Pro	Gly	Ala	Ser	Pro	Thr	Glu	Phe	Gly	
65					70					75					80	
Thr	Tyr	Ala	Gly	Ala	Tyr	Tyr	Pro	Ala	Gln	Gly	Val	Gln	Gln	Phe	Pro	
				85					90					95		
Thr	Gly	Val	Ala	Pro	Ala	Pro	Val	Leu	Met	Asn	Gln	Pro	Pro	Gln	Ile	
			100					105					110			
Ala	Pro	Lys	Arg	Glu	Arg	Lys	Thr	Ile	Arg	Ile	Arg	Asp	Pro	Asn	Gln	
		115					120					125				
Gly	Gly	Lys	Asp	Ile	Thr	Glu	Glu	Ile	Met	Ser	Gly	Ala	Arg	Thr	Ala	
	130					135					140					
Ser	Thr	Pro	Thr	Pro	Pro	Gln	Thr	Gly	Gly	Gly	Leu	Glu	Pro	Gln	Ala	
145					150					155					160	
Asn	Gly	Glu	Thr	Pro	Gln	Val	Ala	Val	Ile	Val	Arg	Pro	Asp	Asp	Arg	
				165					170					175		
Ser	Gln	Gly	Ala	Ile	Ile	Ala	Asp	Arg	Pro	Gly	Leu	Pro	Gly	Pro	Glu	
			180					185					190			
His	Ser	Pro	Ser	Glu	Ser	Gln	Pro	Ser	Ser	Pro	Ser	Pro	Thr	Pro	Ser	
		195					200					205				
Pro	Ser	Pro	Val	Leu	Glu	Pro	Gly	Ser	Glu	Pro	Asn	Leu	Ala	Val	Leu	
	210					215					220					
Ser	Ile	Pro	Gly	Asp	Thr	Met	Thr	Thr	Ile	Gln	Met	Ser	Val	Glu	Glu	
225					230					235					240	
Ser	Thr	Pro	Ile	Ser	Arg	Glu	Thr	Gly	Glu	Pro	Tyr	Arg	Leu	Ser	Pro	
				245					250					255		
Glu	Pro	Thr	Pro	Leu	Ala	Glu	Pro	Ile	Leu	Glu	Val	Glu	Val	Thr	Leu	
			260					265					270			
Ser	Lys	Pro	Val	Pro	Glu	Ser	Glu	Phe	Ser	Ser	Ser	Pro	Leu	Gln	Ala	

		275					280					285			
Pro	Thr	Pro	Leu	Ala	Ser	His	Thr	Val	Glu	Ile	His	Glu	Pro	Asn	Gly
	290					295					300				
Met	Val	Pro	Ser	Glu	Asp	Leu	Glu	Pro	Glu	Val	Glu	Ser	Ser	Pro	Glu
305					310					315					320
Leu	Ala	Pro	Pro	Pro	Ala	Cys	Pro	Ser	Glu	Ser	Pro	Val	Pro	Ile	Ala
				325					330					335	
Pro	Thr	Ala	Gln	Pro	Glu	Glu	Leu	Leu	Asn	Gly	Ala	Pro	Ser	Pro	Pro
			340					345					350		
Ala	Val	Asp	Leu	Ser	Pro	Val	Ser	Glu	Pro	Glu	Glu	Gln	Ala	Lys	Glu
		355					360					365			
Val	Thr	Ala	Ser	Val	Ala	Pro	Pro	Thr	Ile	Pro	Ser	Ala	Thr	Pro	Ala
	370					375					380				
Thr	Ala	Pro	Ser	Ala	Thr	Ser	Pro	Ala	Gln	Glu	Glu	Glu	Met	Glu	Glu
385					390					395					400
Glu	Glu	Glu	Glu	Glu	Glu	Gly	Glu	Ala	Gly	Glu	Ala	Gly	Glu	Ala	Glu
				405					410					415	
Ser	Glu	Lys	Gly	Gly	Glu	Glu	Leu	Leu	Pro	Pro	Glu	Ser	Thr	Pro	Ile
			420					425					430		
Pro	Ala	Asn	Leu	Ser	Gln	Asn	Leu	Glu	Ala	Ala	Ala	Ala	Thr	Gln	Val
		435					440					445			
Ala	Val	Ser	Val	Pro	Lys	Arg	Arg	Arg	Lys	Ile	Lys	Glu	Leu	Asn	Lys
	450					455					460				
Lys	Glu	Ala	Val	Gly	Asp	Leu	Leu	Asp	Ala	Phe	Lys	Glu	Ala	Asn	Pro
465					470					475					480
Ala	Val	Pro	Glu	Val	Glu	Asn	Gln	Pro	Pro	Ala	Gly	Ser	Asn	Pro	Gly
				485					490					495	
Pro	Glu	Ser	Glu	Gly	Ser	Gly	Val	Pro	Pro	Arg	Pro	Glu	Glu	Ala	Asp
			500					505					510		

Glu	Thr	Trp	Asp	Ser	Lys	Glu	Asp	Lys	Ile	His	Asn	Ala	Glu	Asn	Ile
		515					520					525			
Gln	Pro	Gly	Glu	Gln	Lys	Tyr	Glu	Tyr	Lys	Ser	Asp	Gln	Trp	Lys	Pro
	530					535					540				
Leu	Asn	Leu	Glu	Glu	Lys	Lys	Arg	Tyr	Asp	Arg	Glu	Phe	Leu	Leu	Gly
545					550					555					560
Phe	Gln	Phe	Ile	Phe	Ala	Ser	Met	Gln	Lys	Pro	Glu	Gly	Leu	Pro	His
				565					570					575	
Ile	Ser	Asp	Val	Val	Leu	Asp	Lys	Ala	Asn	Lys	Thr	Pro	Leu	Arg	Pro
			580					585					590		
Leu	Asp	Pro	Thr	Arg	Leu	Gln	Gly	Ile	Asn	Cys	Gly	Pro	Asp	Phe	Thr
		595					600					605			
Pro	Ser	Phe	Ala	Asn	Leu	Gly	Arg	Thr	Thr	Leu	Ser	Thr	Arg	Gly	Pro
	610					615					620				
Pro	Arg	Gly	Gly	Pro	Gly	Gly	Glu	Leu	Pro	Arg	Gly	Pro	Ala	Gly	Leu
625					630					635					640
Gly	Pro	Arg	Arg	Ser	Gln	Gln	Gly	Pro	Arg	Lys	Glu	Pro	Arg	Lys	Ιlϵ
				645					650					655	
Ile	Ala	Thr	Val	Leu	Met	Thr	Glu	Asp	Ile	Lys	Leu	Asn	Lys	Ala	Glu
			660					665					670		
Lys	Ala	Trp	Lys	Pro	Ser	Ser	Lys	Arg	Thr	Ala	Ala	Asp	Lys	Asp	Arg
		675					680					685			
Gly	Glu	Glu	Asp	Ala	Asp	Gly	Ser	Lys	Thr	Gln	Asp	Leu	Phe	Arg	Arg
	690					695					700				
Val	Arg	Ser	Ile	Leu	Asn	Lys	Leu	Thr	Pro	Gln	Met	Phe	Gln	Gln	Leu
705					710					715					720
Met	Lys	Gln	Val	Thr	Gln	Leu	Ala	Ile	Asp	Thr	Glu	Glu	Arg	Leu	Lys
				725					730					735	
Gly	Val	Ile	Asp	Leu	Ile	Phe	Glu	Lys	Ala	Ile	Ser	Glu	Pro	Asn	Phe

Ser Val Ala Tyr Ala Asn Met Cys Arg Cys Leu Met Ala Leu Lys Val Pro Thr Thr Glu Lys Pro Thr Val Thr Val Asn Phe Arg Lys Leu Leu Leu Asn Arg Cys Gln Lys Glu Phe Glu Lys Asp Lys Asp Asp Asp Glu Val Phe Glu Lys Lys Gln Lys Glu Met Asp Glu Ala Ala Thr Ala Glu Glu Arg Gly Arg Leu Lys Glu Glu Leu Glu Glu Ala Arg Asp Ile Ala Arg Arg Arg Ser Leu Gly Asn Ile Lys Phe Ile Gly Glu Leu Phe Lys Leu Lys Met Leu Thr Glu Ala Ile Met His Asp Cys Val Val Lys Leu Leu Glu Asn His Asp Glu Glu Ser Leu Glu Cys Leu Cys Arg Leu Leu Thr Thr Ile Gly Lys Asp Leu Asp Phe Glu Lys Ala Lys Pro Arg Met Asp Gln Tyr Phe Asn Gln Met

<210> 3583

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3583

Met Val Glu Val Pro Arg His His Pro Cys Cys Leu Leu Met Ala Leu Gly Trp Val Leu Pro Ser Trp Gly Ser Leu Gly Ala Val Gly Ser Pro Glu Ser Ala Trp Arg Arg Trp Arg Phe Gly Glu Phe Gly Arg Gln Ala Gly Val Ser Cys Arg Gly Pro Gly Lys Gly Asp Cys Asp Ser Gly Ser Ser Arg Ala Lys Ala Leu Gly Leu Gly Leu Gly Gln Pro Gln Gly Leu Thr Pro Ala His Cys Thr Leu Arg Phe Gln Leu Pro Gly Ala Gly Glu Met Ala Glu Pro Gly Pro Trp Met Ile Ser Val Pro Val Pro Leu Phe Pro Gly Ser Ala Ala Glu Pro Ser Thr Ala Ser Ser Ser Pro Thr Trp Arg Asn Thr Gly Pro Asn Arg Gly Cys Gly Ser Lys Thr His Thr Arg Thr Arg Pro Gly Ala Ala Leu Cys Ser Ser Gly Pro Trp Leu Gly Leu Val Val Met

<210> 3584

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3584 Met Thr Ser Ser Thr Ser Thr Ala Met Ile Thr Ile Tyr Met Pro Ala 5 10 15 1 Ser Leu Arg Phe Ile Thr Ala Asn Pro Ile Ser Ser Leu Glu Leu Gln 20 25 30 Met Cys Gly Tyr Leu Ser Leu Tyr Ile Pro Asp Pro Gln Asn Ser Ala 40 45 35 Lys Met Ser Tyr Val Pro Phe Gln Thr Cys Ser Phe Ser His Ile Ala 50 55 60 Tyr Leu Gly Lys Trp Asn Pro His Pro Thr Gly Val Leu Ala Ser Phe 70 75 80 65 Leu Ile Pro Pro Ala Pro Ala Ser His Ser His Ser Gln Ile Leu Pro 85 90 95 Gly Ile Pro Cys Arg Glu Leu Ala Asn Leu Ser Thr Ser Leu Leu Pro 100 105 110

Leu Leu Pro Val Pro Ser Phe Gly Leu Leu Ser Thr Leu Ile Gln Arg 115 120 125

Ile Thr Lys Val Ser 130

<210> 3585

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3585

Met Pro Ser Ser Leu Gly Leu Cys Ile Cys Ile Ser Phe Ser Phe Leu

1 5 10 15

Leu Tyr Thr Ala Ala Phe Gln Phe Phe Leu Val Phe Leu Ser Leu Pro Pro Ala Ser Ser Trp Ser Leu Ser Cys Ser Val Ile Leu Leu Ser Leu Ile Ser Cys Pro Gln Val Ser Val Gly Leu Cys Ser Pro Ala Ala His Ser Cys His Gly Thr His His Cys Phe Gln Leu Phe Pro Thr Ser Tyr Pro Asn Tyr Ala Ile Val Pro Ile Ser Thr Leu Ile Gln Ala Arg Gln Lys Ala Val Pro Trp Ala Ala Pro His Lys Pro Glu His Cys Arg Ser Val Ser Phe Phe Thr Leu Cys Pro Glu Gly Arg Ala Arg Val Val Phe Phe <210> 3586 <211> 425 <212> PRT <213> Homo sapiens <400> 3586 Met Leu Lys His Gln Cys Ser Cys Gly Asp Asn Ser Arg His Pro Glu

His Ala Gly Arg Ile Gln Ser Ile Trp Ser Arg Leu Gln Glu Arg Gly

Leu Arg Ser Gln Cys Glu Cys Leu Arg Gly Arg Lys Ala Ser Leu Glu

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		35					40					45			
Glu	Leu	Gln	Ser	Val	His	Ser	Glu	Arg	His	Val	Leu	Leu	Tyr	Gly	Thr
	50					55					60				
Asn	Pro	Leu	Ser	Arg	Leu	Lys	Leu	Asp	Asn	Gly	Lys	Leu	Ala	Gly	Leu
65					70					75					80
Leu	Ala	Gln	Arg	Met	Phe	Val	Met	Leu	Pro	Cys	Gly	Gly	Val	Gly	Val
				· 85					90					95	
Asp	Thr	Asp	Thr	Ile	Trp	Asn	Glu	Leu	His	Ser	Ser	Asn	Ala	Ala	Arg
			100					105					110		
Trp	Ala	Ala	Gly	Ser	Val	Thr	Asp	Leu	Ala	Phe	Lys	Val	Ala	Ser	Arg
		115					120					125			
Glu	Leu	Lys	Asn	Gly	Phe	Ala	Val	Val	Arg	Pro	Pro	Gly	His	His	Ala
	130					135					140				
Asp	His	Ser	Thr	Ala	Met	Gly	Phe	Cys	Phe	Phe	Asn	Ser	Val	Ala	Ile
145					150					155					160
Ala	Cys	Arg	Gln	Leu	Gln	Gln	Gln	Ser	Lys	Ala	Ser	Lys	Ile	Leu	Ile
				165					170					175	
Val	Asp	Trp	Asp	Val	His	His	Gly	Asn	Gly	Thr	Gln	Gln	Thr	Phe	Tyr
			180					185					190		
Gln	Asp	Pro	Ser	Val	Leu	Tyr	Ile	Ser	Leu	His	Arg	His	Asp	Asp	Gly
		195					200					205			
Asn	Phe	Phe	Pro	Gly	Ser	Gly	Ala	Val	Asp	Glu	Val	Gly	Ala	Gly	Ser
	210					215					220				
Gly	Glu	Gly	Phe	Asn	Val	Asn	Val	Ala	Trp	Ala	Gly	Gly	Leu	Asp	Pro
225					230					235					240
Pro	Met	Gly	Asp	Pro	Glu	Tyr	Leu	Ala	Ala	Phe	Arg	Ile	Val	Val	Met
				245					250					255	
Pro	Ile	Ala	Arg	Glu	Phe	Ser	Pro	Asp	Leu	Val	Leu	Val	Ser	Ala	Gly
			260					265					270		

Phe Asp Ala Ala Glu Gly His Pro Ala Pro Leu Gly Gly Tyr His Val Ser Ala Lys Cys Phe Gly Tyr Met Thr Gln Gln Leu Met Asn Leu Ala Gly Gly Ala Val Val Leu Ala Leu Glu Gly Gly His Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ala Ala Leu Leu Gly Asn Arg Val Asp Pro Leu Ser Glu Glu Gly Trp Lys Gln Lys Pro Asn Leu Asn Ala Ile Arg Ser Leu Glu Ala Val Ile Arg Val His Ser Lys Tyr Trp Gly Cys Met Gln Arg Leu Ala Ser Cys Pro Asp Ser Trp Val Pro Arg Val Pro Gly Ala Asp Lys Glu Glu Val Glu Ala Val Thr Ala Leu Ala Ser Leu Ser Val Gly Ile Leu Ala Glu Asp Arg Pro Ser Glu Gln Leu Val Glu Glu Glu Pro Met Asn Leu

<210> 3587

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3587

Met Ser Pro Thr Leu His Ser Pro Gln Arg Ser Ser Cys Ser Gly Gly

Leu Ser Gln Ala Leu Gly Ala Asp Pro Trp Glu Gly Leu Phe Leu Tyr Lys Ala Val Thr Leu Trp Gly Gln Gly Thr Ala Gly Ala Asn Val Leu Thr Phe Gly Ala Gly Ser Arg Leu Thr Val Leu Gly Glu Phe Ser Arg Asp His Pro Gly Gly Gly Ile Gln Val Glu Gly Gly Cys Phe Ala Ala Pro Gly Pro Ala Leu Cys Trp Glu Thr Trp Ala Gly Ser Pro Gly Trp Ala Gly Ala Arg Gly Ala Leu Glu Val Cys Met Arg Asp Cys Thr Ser Val Leu Leu Arg Ala Val Leu Arg Ala Gly His Gln Ala His Gly His Arg <210> 3588 <211> 110 <212> PRT <213> Homo sapiens <400> 3588 Met Ala Ser Ala His Leu Asp Arg Ile Leu Leu Val Ser Cys Pro Leu

Pro Glu Ser Gln Leu Met Gln Asp Pro Ser Gln Ser Ser Glu Thr Lys

Gln Thr Thr Val Thr Thr Ser Ser Leu Met Ala His Asn Thr Leu Ile 45 35 40 Val Leu Leu Tyr Lys Ser Ala Tyr Val Tyr Lys Ser Ala Asn Val His 50 55 60 Leu Ser Pro Met Leu Leu Cys Val Tyr Leu Pro Pro Ser Ser Leu Val 70 75 80 65 Ser Phe Leu Arg Ala Gly Thr Gly Phe Tyr Lys Ser Leu Pro Pro 90 95 85 Pro Ser Met Thr Glu Val Phe Ala His Asn Arg Ile Ala Thr 100 105 110

<210> 3589

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3589

Met Leu Gly Thr Met Ala Leu Ala Ala Cys Gln Phe Met Glu Glu Pro

1 5 10 15

Gly Met Glu Val Gln Val Arg Glu Ser Lys His Pro Tyr Asn Asn Asn 20 25 30

Thr Asn Phe Glu Asp Lys Val His Ile Pro Gly Ala Ile Tyr Leu Ser

35 40 45

Ile Lys Phe Asp Ser Gln Cys Asn Thr Glu Glu Gly Cys Asp Glu Leu 50 55 60

Ala Met Ser Ser Ser Ser Asp Phe Gln Gln Asp Arg His Ser Phe Ser 65 70 75 80

Gly Ser Gln Gln Lys Trp Lys Asp Phe Glu Leu Pro Gly Asp Thr Leu

				85	٠				90					95	
Tyr	Tyr	Arg	Phe	Thr	Ser	Asp	Met	Ser	Asn	Thr	Glu	Trp	Gly	Tyr	Arg
			100					105					110		
Phe	Thr	Val	Thr	Ala	Gly	His	Leu	Gly	Arg	Phe	Gln	Thr	Gly	Phe	Glu
		115					120					125			
Ile	Leu	Lys	Gln	Met	Leu	Ser	Glu	Glu	Arg	Val	Val	Pro	His	Leu	Pro
	130					135					140				
Leu	Ala	Lys	Ile	Trp	Glu	Trp	Leu	Val	Gly	Val	Ala	Cys	Arg	Gln	Thr
145					150					155					160
Gly	His	Gln	Arg	Leu	Lys	Ala	Ile	His	Leu	Leu	Leu	Arg	Ile	Val	Arg
				165					170					175	
Cys	Cys	Gly	His	Ser	Asp	Leu	Cys	Asp	Leu	Ala	Leu	Leu	Lys	Pro	Leu
			180					185					190		
Trp	Gln	Leu	Phe	Thr	His	Met	Glu	Tyr	Gly	Leu	Phe	Glu	Asp	Val	Thr
		195					200					205			
Gln	Pro	Gly	Ile	Leu	Leu	Pro	Leu	His	Arg	Ala	Leu	Thr	Glu	Leu	Phe
	210					215					220				
Phe	Val	Thr	Glu	Asn	Arg	Ala	Gln	Val	Arg	Pro	Glu	Val	Trp	Ala	Gly
225					230					235					240
Ser	Pro	Val	Pro	Pro	Cys	Ala	Phe	Ala	Pro	Ser	Ala	Thr	Gln	Gly	Arg
				245					250					255	
Ser	Cys	Cys	Leu	Ile	Arg	Ala									
			260												

<210> 3590

<211> 1090

<212> PRT

<213> Homo sapiens

<400)> 35	590													
Met	Glu	Gln	Pro	Lys	Gly	Val	Asp	Trp	Thr	Val	Ile	Ile	Leu	Thr	Cys
1				5					10					15	
Gln	Tyr	Lys	Asp	Ser	Val	Gln	Val	Phe	Gln	Arg	Glu	Leu	Glu	Val	Arg
			20					25					30		
Gln	Lys	Arg	Glu	Gln	Ile	Pro	Ala	Gly	Thr	Leu	Leu	Leu	Ala	Val	Glu
		35					40					45			
Asp	Pro	Glu	Lys	Arg	Val	Gly	Ser	Gly	Gly	Ala	Thr	Leu	Asn	Ala	Leu
	50					55					60				
Leu	Val	Ala	Ala	Glu	His	Leu	Ser	Ala	Arg	Ala	Gly	Phe	Thr	Trp	Ιlϵ
65					70					75					80
Cys	Val	Gly	Val	Ser	Leu	Trp	Ile	Arg	Gly	Cys	His	Pro	Pro	Gly	Arg
				85					90					95	
Leu	Pro	Glu	Ala	Ser	Val	His	Arg	Ala	Phe	Pro	Leu	Leu	Gln	Val	Val
			100					105					110		
Thr	Ser	Asp	Val	Leu	His	Ser	Ala	Trp	Ile	Leu	Ile	Leu	His	Met	Gly
		115					120					125			
Arg	Asp	Phe	Pro	Phe	Asp	Asp	Cys	Gly	Arg	Ala	Phe	Thr	Cys	Leu	Pro
	130					135					140				
Val	Glu	Asn	Pro	Glu	Ala	Pro	Val	Glu	Ala	Leu	Val	Cys	Asn	Leu	Asp
145					150					155					160
Cys	Leu	Leu	Asp	·Ile	Met	Thr	Tyr	Arg	Leu	Gly	Pro	Gly	Ser	Pro	Pro
				165					170					175	
Gly	Val	Trp	Val	Cys	Ser	Thr	Asp	Met	Leu	Leu	Ser	Val	Pro	Ala	Asr
			180					185					190		
Pro	Gly	Ile	Ser	Trp	Asp	Ser	Phe	Arg	Gly	Ala	Arg	Val	Ile	Ala	Lei
		195					200					205			

Pro Gly Ser Pro Ala Tyr Ala Gln Asn His Gly Val Tyr Leu Thr Asp

	210					215					220				
Pro	Gln	Gly	Leu	Val	Leu	Asp	Ile	Tyr	Tyr	Gln	Gly	Thr	Glu	Ala	Glu
225					230					235					240
Ile	Gln	Arg	Cys	Val	Arg	Pro	Asp	Gly	Arg	Val	Pro	Leu	Val	Ser	Gly
				245					250					255	
Val	Val	Phe	Phe	Ser	Val	Glu	Thr	Ala	Glu	Arg	Leu	Leu	Ala	Thr	His
			260					265					270		
Val	Ser	Pro	Pro	Leu	Asp	Ala	Cys	Thr	Tyr	Leu	Gly	Leu	Asp	Ser	Gly
		275					280					285			
Ala	Arg	Pro	Val	Gln	Leu	Ser	Leu	Phe	Phe	Asp	Ile	Leu	His	Cys	Met
	290					295					300				
Ala	Glu	Asn	Val	Thr	Arg	Glu	Asp	Phe	Leu	Val	Gly	Arg	Pro	Pro	Glu
305					310					315					320
Leu	Gly	Gln	Gly	Asp	Ala	Asp	Val	Àla	Gly	Tyr	Leu	Gln	Ser	Ala	Arg
				325					330					335	
Ala	Gln	Leu	Trp	Arg	Glu	Leu	Arg	Asp	Gln	Pro	Leu	Thr	Met	Ala	Tyr
			340					345					350		
Val	Ser	Ser	Gly	Ser	Tyr	Ser	Tyr	Met	Thr	Ser	Ser	Ala	Ser	Glu	Phe
		355					360					365			
Leu	Leu	Ser	Leu	Thr	Leu	Pro	Gly	Ala	Pro	Gly	Ala	Gln	Ile	Val	His
	370					375					380				
Ser	Gln	Val	Glu	Glu	Gln	Gln	Leu	Leu	Ala	Ala	Gly	Ser	Ser	Val	Val
385					390					395					400
Ser	Cys	Leu	Leu	Glu	Gly	Pro	Val	Gln	Leu	Gly	Pro	Gly	Ser	Val	Leu
				405					410					415	
Gln	His	Cys	His	Leu	Gln	Gly	Pro	Ile	His	Ile	Gly	Ala	Gly	Cys	Leu
			420					425					430		
Val	Thr	Gly	Leu	Asp	Thr	Ala	His	Ser	Lys	Ala	Leu	His	Gly	Arg	Glu
		435					440					445			

L	eu	Arg	Asp	Leu	Val	Leu	Gln	Gly	His	His	Thr	Arg	Leu	His	Gly	Ser
		450					455					460				
P	ro	Gly	His	Ala	Phe	Thr	Leu	Val	Gly	Arg	Leu	Asp	Ser	Trp	Glu	Arg
4	65					470					475					480
G	ln	Gly	Ala	Gly	Thr	Tyr	Leu	Asn	Val	Pro	Trp	Ser	Glu	Phe	Phe	Lys
					485					490					495	
A	rg	Thr	Gly	Val	Arg	Ala	Trp	Asp	Leu	Trp	Asp	Pro	Glu	Thr	Leu	Pro
				500					505					510		
A	la	Glu	Tyr	Cys	Leu	Pro	Ser	Ala	Arg	Leu	Phe	Pro	Val	Leu	His	Pro
			515					520					525			
S	er	Arg	Glu	Leu	Gly	Pro	Gln	Asp	Leu	Leu	Trp	Met	Leu	Asp	His	Gln
		530					535					540				
G	lu	Asp	Gly	Gly	Glu	Ala	Leu	Arg	Ala	Trp	Arg	Ala	Ser	Trp	Arg	Leu
5	45					550					555					560
S	er	Trp	Glu	Gln	Leu	Gln	Pro	Cys	Leu	Asp	Arg	Ala	Ala	Thr	Leu	Ala
					565					570					575	
S	er	Arg	Arg	Asp	Leu	Phe	Phe	Arg	Gln	Ala	Leu	His	Lys	Ala	Arg	His
				580					585					590		
V	al	Leu	Glu	Ala	Arg	Gln	Asp	Leu	Ser	Leu	Arg	Pro	Leu	Ile	Trp	Ala
			595					600					605			
A	la	Val	Arg	Glu	Gly	Cys	Pro	Gly	Pro	Leu	Leu	Ala	Thr	Leu	Asp	Gln
		610					615					620				
V	al	Ala	Ala	Gly	Ala	Gly	Asp	Pro	Gly	Val	Ala	Ala	Arg	Ala	Leu	Ala
6	25					630					635					640
C	ys	Val	Ala	Asp	Val	Leu	Gly	Cys	Met	Ala	Glu	Gly	Arg	Gly	Gly	Leu
					645					650					655	
A	rg	Ser	Gly	Pro	Ala	Ala	Asn	Pro	Glu	Trp	Met	Arg	Pro	Phe	Ser	Tyr
				660					665					670		
T	ΔIJ	Glu	Cve	Glv	Aen	ا ا	Ala	Ala	Glv	Val	Glu	Ala	Leu	Ala	Gln	Gb

Arg Asp Lys Trp Leu Ser Arg Pro Ala Leu Leu Val Arg Ala Ala Arg His Tyr Glu Gly Ala Gly Gln Ile Leu Ile Arg Gln Ala Val Met Ser Ala Gln His Phe Val Ser Thr Glu Gln Val Glu Leu Pro Gly Pro Gly Gln Trp Val Val Ala Glu Cys Pro Ala Arg Val Asp Phe Ser Gly Gly Trp Ser Asp Thr Pro Pro Leu Ala Tyr Glu Leu Gly Gly Ala Val Leu Gly Leu Ala Val Arg Val Asp Gly Arg Arg Pro Ile Gly Ala Arg Ala Arg Arg Ile Pro Glu Pro Glu Leu Trp Leu Ala Val Gly Pro Arg Gln Asp Glu Met Thr Val Lys Ile Val Cys Arg Cys Leu Ala Asp Leu Arg Asp Tyr Cys Gln Pro His Ala Pro Gly Ala Leu Leu Lys Ala Ala Phe Ile Cys Ala Gly Ile Val His Val His Ser Glu Leu Gln Leu Ser Thr Ser Ser Ile Leu Ala Gly Thr Ala Leu Ala Ala Leu Gln Arg Ala Ala Gly Arg Val Val Gly Thr Glu Ala Leu Ile His Ala Val Leu His Leu Glu Gln Val Leu Thr Thr Gly Gly Gly Trp Gln Asp Gln Val Gly Gly Leu Met Pro Gly Ile Lys Val Gly Arg Ser Arg Ala Gln Leu Pro Leu

Lys Val Glu Val Glu Glu Val Thr Val Pro Glu Gly Phe Val Gln Lys
915 920 925

Leu Asn Asp His Leu Leu Leu Val Tyr Thr Gly Lys Thr Arg Leu Ala 930 935 940

Arg Asn Leu Leu Gln Asp Val Leu Arg Ser Trp Tyr Ala Arg Leu Pro 945 950 955 960

Ala Val Val Gln Asn Ala His Ser Leu Val Arg Gln Thr Glu Glu Cys 965 970 975

Ala Glu Gly Phe Arg Gln Gly Ser Leu Pro Leu Leu Gly Gln Cys Leu
980 985 990

Thr Ser Tyr Trp Glu Gln Lys Lys Leu Met Ala Pro Gly Cys Glu Pro 995 1000 1005

Leu Thr Val Arg Arg Met Met Asp Val Leu Ala Pro His Val His Gly
1010 1015 1020

Gln Ser Leu Ala Gly Ala Gly Gly Gly Gly Phe Leu Tyr Leu Leu Thr 1025 1030 1035 1040

Lys Glu Pro Gln Gln Lys Glu Ala Leu Glu Ala Val Leu Ala Lys Thr 1045 1050 1055

Glu Gly Leu Gly Asn Tyr Ser Ile His Leu Val Glu Val Asp Thr Gln 1060 1065 1070

Gly Leu Ser Leu Lys Leu Leu Gly Thr Glu Ala Ser Thr Cys Cys Pro 1075 1080 1085

Phe Pro

1090

<210> 3591

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3591

Met Phe Phe Asn Val Val His Thr Tyr Phe Phe Phe Phe Phe Thr

1 5 10 15

Leu Leu Ser Arg Leu Glu Cys Ser Gly Val Ile Ser Ala Tyr Cys Asn

20 25 30

Leu Cys Leu Pro Gly Ser Ser Asn Ser Pro Val Ser Ala Ser Arg Val

35 40 45

Ala Gly Ile Thr Gly Ala Arg His His Ala Trp Leu Val Phe Ile Phe

50 55 60

Leu Val Glu Val Arg Phe Gln His Ile Gly Gln Ala Gly Leu Glu Leu

65 70 75 80

Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Trp Ile

85 90 95

Thr Gly Val Ser His His Ala Gln Leu Lys His Thr Phe Leu Cys Cys

100 105 110

Arg Phe Ser Ser Lys Asp Ser Lys Phe Tyr Asn Ser Arg Asn His Ile

115 120 125

Pro Ser Thr Tyr His Ser Leu Ala Tyr Met Gly Arg Gln Leu Phe Met

130 135 140

Asp Glu

145

<210> 3592

<211> 113

<212> PRT

<213> Homo sapiens

Gln Lys Gln Phe Ala Phe Ser Phe Leu Phe Tyr Leu Arg Gly Ile Ser

55

70

60

75

Thr Leu Trp Leu Cys Val Ile Met Leu Phe Gly Glu Asn Leu Ile Ala 85 90 95

Phe His Phe His Glu Ile Pro His Trp Ser Ile Thr Leu Met Thr Leu
100 105 110

Cys

65

<210> 3593

50

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3593

Met Ala Ser Gln Ser Gly Ser Ser Leu Gly Leu Leu Ala Trp Phe Leu

1 5 10 15

Leu Leu Gln Pro Trp Leu Glu Glu Ala Arg Ala Gly Arg Val Gly Ala

Gln Gly Gly Val Ala Leu Leu Phe Pro Ser Ala Leu Pro Ser Gly Pro Gly Gly Gln Asp Pro Gly Ala Ser Gly Trp Glu Pro Pro Pro Val Gly Ala Pro Gly Ser Pro Ala Ala Pro Gln Ser Arg Gly Asn Ala Val Arg Pro Ala Ser Val Leu Leu Pro Ser Ala Cys Gly Gln Arg Thr Ser Arg Ile Thr Gly Gly Leu Pro Ala Pro Asp Arg Lys Trp Pro Trp Gln Val Ser Leu Gln Thr Ser Asn Arg His Ile Cys Gly Gly Ser Leu Ile Ala Arg His Trp Val Leu Thr Ala Ala His Cys Ile Ser Gly

<210> 3594

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3594

Met Ser Asp Pro Gln Thr Glu Glu Leu Lys Val Lys Phe Tyr Arg Asp

1 5 10 15

Asn Gln Gly His Leu Lys Gly Asp Arg Leu Cys Asp His Trp Lys Arg

Glu Ala Val Asp Leu Ala Phe Met His Leu Asp Glu Asp Asp Thr Gly
35 40 45

Asn	Cys	Thr	Leu	Gln	Val	Glu	Val	Ala	Lys	Tyr	Gln	Arg	Asn	Gly	Lys
	50					55					60				
Tyr	Glu	Ala	Ser	Gly	Arg	Lys	Cys	Ala	Asn	His	Arg	Lys	Ala	Pro	Ser
65					70					75					80
Leu	Arg	Gln	Lys	Arg	Pro	Arg	Arg	Ser	Pro	Ser	Lys	Arg	Arg	Asp	Thr
				85					90					95	
Ser	Glu	Leu	Ser	Ser	Ser	Asn	Thr	Phe	His	Pro	Val	Asp	Phe	Glu	Asp
			100					105					110		
Gly	Gln	Arg	Arg	Pro	Ser	Arg	Arg	Val	Lys	Phe	Gly	Pro	Thr	Arg	Arg
		115					120					125			
Leu	Ile	Val	Phe	Asp	Arg	His	Pro	Ala	Gly	Glu	Pro	Val	Ser	Trp	Arg
	130					135					140				
Asn	Ala	Gly	Ala	Ala	Ala	His	Cys	Ile	Gln	Thr	Phe	Asp	Gly	Leu	Ιle
145					150					155					160
Pro	Ser	Pro	Lys	Ala	Gly	Val	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Glr
				165					170					175	
Pro	Leu	Pro	Pro	Ser	Ser	Ser	Asp	Ser	Leu	Thr	Ser	Ala	Ser	Gln	Val
			180					185					190		
Pro	Gly	Thr	Ala	Asp	Val	Cys	His	His	Thr	Trp	Leu	Ile	Phe	Phe	Phe
		195					200					205			
Phe	Tyr	Arg	Val	Gly	Val	Ser	Pro	Cys	Cys	Pro	Gly	Trp	Pro	Gln	Thr
	210					215					220				
Ala	Glu	Leu	Lys	Gln	Ser	Ala	His	Leu	Ser	Leu	Gln	Lys	Cys	Trp	Asp
225					230					235					240
Ser	Arg	Trp	Glu	Pro	Ser	Arg	Leu	Ala	Ile	Phe	Lys	Lys	Ser	Leu	Ala
				245					250					255	
Leu	Ser	Pro	Arg	Leu	Glu	Cys	Ser	Gly	Ala	Ile	Ser	Ala	His	Cys	Lys
			260					265					270		
Leu	Cys	Phe	Pro	Ala	Ser	Arg	His	Ser	Pro	Ala	Ser	Ala	Ser	Arg	Val

275

Ala Gly Thr Ala Gly Ala Arg His Gln Thr Arg Leu Asn Ile Cys Ile
290

295

300

Phe Gly Arg Asp Gly Val Ser Leu Cys Trp Pro Gly Trp Ser Arg Ser
305

310

315

320

Ala Thr Ser Ala Leu Trp Glu Ala Gln Gly Gly Lys Ile Thr
325 330

<210> 3595

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3595

Met Arg Val Ile Ser Ile Lys Asn Tyr His Pro Lys Ile Arg Ile Ile
1 5 10 15

Thr Gln Met Leu Gln Tyr His Asn Lys Ala His Leu Leu Asn Ile Pro
20 25 30

Ser Trp Asn Trp Lys Glu Gly Asp Asp Ala Ile Cys Leu Ala Glu Leu
35 40 45

Lys Leu Gly Phe Ile Ala Gln Ser Cys Leu Ala Gln Gly Leu Ser Thr
50 55 60

Met Leu Ala Asn Leu Phe Ser Met Arg Ser Phe Ile Lys Ile Glu Glu 65 70 75 80

Asp Thr Trp Gln Lys Tyr Tyr Leu Glu Gly Val Ser Asn Glu Met Tyr

85 90 95

Thr Glu Tyr Leu Ser Ser Ala Phe Val Gly Leu Ser Phe Pro Thr Val
100 105 110

Cys Glu Leu Cys Phe Val Lys Leu Lys Leu Leu Met Ile Ala Ile Glu 120 115 125 Tyr Lys Ser Ala Asn Arg Glu Ser Arg Ile Leu Ile Asn Pro Gly Asn 135 130 140 His Leu Lys Ile Gln Glu Gly Thr Leu Gly Phe Phe Ile Ala Ser Asp 150 155 160 145 Ala Lys Glu Val Lys Arg Pro Pro Gln Leu Cys Leu Pro Leu Ala Ala 170 165 175 Gln Lys Arg Cys Phe Gln Ser Asp Lys Leu Asp Ile Phe Ile 180 190 185

<210> 3596

<211> 398

<212> PRT

<213> Homo sapiens

<400> 3596

Met Phe Ser Glu Ser Arg Cys Ser Ser Ser Thr Gln Thr Gln Gly Arg

1 5 10 15

Arg Pro Arg Lys Asn Lys Asp Ala Pro Lys Lys Ile Pro Ala Ala Tyr
20 25 30

Gly Gly Pro Glu Asn Val Gln Ile Glu Asp Ser His Thr Ser Gln Ala 35 40 45

Ile Cys Leu Gln Asp Ala Pro Ser Gly Gln Gln Leu Ala Gly Leu Pro
50 55 60

Arg Ser Gln Gln Gln Arg His Leu Pro Phe Phe Leu Glu Lys Lys Gly
65 70 75 80

Glu Ser Ser Arg Lys His Arg Tyr Pro Gln Ser Met Trp Glu Pro Glu

				85					90					95	
Gly	Lys	Glu	Leu	Gln	Leu	Asp	Gln	Glu	Glu	Arg	Ala	Pro	Trp	Ile	Glu
			100					105					110		
Ile	Phe	Leu	Gly	Asn	Ser	Thr	Pro	Ser	Thr	Gln	Gly	Gln	Gly	Lys	Gly
		115					120					125			
Ala	Met	Gly	Thr	Gln	Lys	Glu	Val	Ile	Gly	Met	Glu	Ala	Glu	Val	Thr
	130					135					140				
Gly	Val	Leu	Leu	Val	Ala	Glu	Gly	Gln	Arg	Thr	Thr	Glu	Gly	Thr	His
145					150					155					160
Lys	Lys	Glu	Ala	Glu	Trp	Ser	His	Val	Gln	Arg	Leu	Leu	Met	Pro	Ser
				165					170					175	
Pro	Arg	Gly	Ala	Val	Glu	Gly	Ala	Val	Ser	Gly	Ser	Arg	Gln	Gly	Ser
			180					185					190		
Gly	Gly	Ser	Ser	Ile	Leu	Gly	Glu	Pro	Trp	Val	Leu	Gln	Gly	His	Ala
		195					200					205			
Thr	Lys	Glu	Asp	Ser	Thr	Val	Glu	Asn	Pro	Gln	Val	Gln	Thr	Glu	Val
	210					215					220				
Thr	Leu	Val	Ala	Arg	Arg	Glu	Glu	Gln	Ala	Glu	Val	Ser	Leu	Gln	Asp
225					230					235					240
Glu	Ile	Lys	Ser	Leu	Arg	Leu	Gly	Leu	Arg	Lys	Ala	Glu	Glu	Gln	Ala
				245					250					255	
Gln	Arg	Gln	Glu	Gln	Leu	Leu	Arg	Glu	Gln	Glu	Gly	Glu	Leu	Gln	Ala
			260					265					270		
Leu	Arg	Glu	Gln	Leu	Ser	Arg	Cys	Gln	Glu	Glu	Arg	Ala	Glu	Leu	Gln
		275					280					285			
Ala	Gln	Leu	Glu	Gln	Lys	Gln	Gln	Glu	Ala	Glu	Arg	Arg	Asp	Ala	Met
	290					295					300				
Tyr	Gln	Glu	Glu	Leu	Gly	Gly	Gln	Arg	Asp	Leu	Val	Gln	Ala	Met	Lys
305					310					315					320

Arg Arg Val Leu Glu Leu Ile Gln Glu Lys Asp Arg Leu Trp Gln Arg 325 330 335 Leu Gln His Leu Ser Ser Met Ala Pro Glu Cys Cys Val Ala Cys Ser 340 345 350 Lys Ile Phe Gly Arg Phe Ser Arg Arg Tyr Pro Cys Arg Leu Cys Gly 360 365 355 Gly Leu Leu Cys His Ala Cys Ser Met Asp Tyr Lys Lys Arg Asp Arg 375 380 370

395

Cys Cys Pro Pro Cys Ala Gln Gly Arg Glu Ala Gln Val Thr

390

<210> 3597

385

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3597

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly

1 5 10 15

Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
20 25 30

Pro Gly Ser Trp Val Lys Val Ser Cys Gln Ala Ser Gly Ala Asn Phe
35 40 45

Ala Thr Ser Ala Phe Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
50 55 60

Asp Trp Val Gly Thr Ile Ile Pro Leu Phe Gly Ser Pro Asn His Ala
65 70 75 80

Gln Arg Leu Glu Gly Arg Leu Thr Leu Ser Ala Val Lys Ser Thr Thr

				85					90					95	
Thr	Val	Tyr	Met	Glu	Leu	Arg	Ser	Leu	Thr	Ser	Glu	Asp	Thr	Ala	Val
			100					105					110		
Tyr	Tyr	Cys	Ala	Arg	Gly	Thr	Arg	Thr	Phe	Arg	Asn	Phe	Asp	Ile	Gly
		115					120					125			
Pro	Tyr	Leu	Asp	Ser	Ser	Asp	Val	Trp	Gly	Gln	Gly	Thr	Met	Val	Thr
	130					135					140				
Val	Ser	Ala	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro
145					150					155					160
Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val
,				165					170					175	
Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala
			180					185					190		
Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly
		195					200					205			
Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly
	210					215					220				
Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys
225					230					235					240
Ala	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys
				245					250					255	
Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu
			260					265					270		
Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
		275					280					285			
Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys
	290					295					300				
Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys
305					310					315					320

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Gly Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys

<210> 3598

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3598

Met Ala Ala Arg Glu Ala Glu Arg Ser Ala Gly Pro Arg Arg Pro Glu

Ala Gly Ser Glu Leu Gln Ala Ala Pro Gly Ala Pro Gln Leu Ala Gly Thr Gly Arg Asp Pro Ala Gly Arg Ala Asp Ala Arg Ala Arg Gln Pro Arg Thr Pro Leu Pro Val Pro Leu Arg Ser Leu Ala Ala Leu Ile Cys Arg Lys Ser Arg Arg Trp Pro Gly Phe Ser Ala Pro Ala Val Gly Arg Trp Trp Ala Ala Ala Cys Glu Gly Gly Pro Gly Pro Asp His Val Pro Pro Val Cys Ala Arg Arg Pro Leu Leu Ala Glu Leu Gly Pro Gly Lys Arg Asp Pro Ser Cys Ala Leu Lys Trp Ala <210> 3599 <211> 171 <212> PRT <213> Homo sapiens

<400> 3599
Met His Ser Ser Ser Ser Ser Leu His Asn Leu Gly Leu Ser Pro Pro 1
5
10
15
Pro Pro Ser Val His Asn Leu Gly Ser Gly Ser His Leu His Glu Thr 20
25
30
Leu Lys Pro Leu Pro Ser Glu Gln Ser Leu Ser Pro Gly Phe Ser Thr 35
40
45

Ala Ala Tyr Ser Ser Ser Pro Thr Gly Ala Val Ser Ser Arg Ile Phe 60 50 55 Thr Lys Gly Pro His Pro Glu His Ser Leu Leu His Glu Ala Ala Ala 70 75 80 65 Glu His Ser Gly Gln Ser Leu Arg Thr Asn Asn Pro Pro Ile Ala Leu 90 85 95 Lys His Pro Trp Phe Pro Leu Phe Gln Ser His Pro Cys Gly Ile Leu 100 105 110 Thr Ser Trp Leu Ser His Pro Thr Gly Tyr Pro Pro Leu Asp Ser Phe 115 120 125 Asp Phe Thr Phe Cys Gly Leu Ser Ser Asn Tyr Val Asn Ser Asp Pro 130 135 140 Ser Val Arg Val Ser Cys Thr Ser Asp Ser Pro Val Gly Leu Leu Lys 145 150 155 160 Val His Val Pro Gly Ser His Pro Arg Leu Phe 165 170

<210> 3600

<211> 173

<212> PRT

<213> Homo sapiens

<400> 3600

Met Leu Gly Val Arg Ala Arg Pro Ala Ser Cys Gly Gly Arg Gly Gly

1 5 10 15

Ser Val Lys Leu Ala Leu Ala Arg Ala Ser Ser His Pro Pro Leu Pro
20 25 30

Ser Gly Glu Ser Val Tyr Pro Pro Pro Ala Cys Leu Arg His Leu Ile

Gly Cys Arg Ser Cys Gly Thr Gly Pro Leu Leu Ala Arg Val Ser His Glu Arg Asn His Cys Ala Gly Arg Gly Gly Gly Glu Ala Gly Val Gly Thr Val Leu Pro Glu Ala Glu Arg Arg Ser Val Trp Pro Arg Ala Pro Ala Gln Arg Gly Arg Lys Arg Ala Leu Glu Ala Gly Ala Gly Cys Arg Pro Arg Leu Leu Asp Gly Gly Gly Arg Gly Ser Ala Pro Gly Ser His Arg Leu Lys Gly Glu Thr Ser Pro Thr Cys Tyr Arg His Ser Trp Gly Trp Gly Arg Ser Gly Gly Arg Ser Gly Trp Phe Val Gly Gly Arg Arg Leu Phe Ser Lys Asn Arg Arg Glu Leu Gln Ser

<210> 3601

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3601

Met Glu Ser Gly Ser Val Ser Gln Ala Gly Val Gln Trp Arg Asp Pro

1 5 10 15

Pro Ala His Cys Ile Leu His Leu Ser Ser Ser Ser Asp Ser Pro Ala

20 25 30

Ser Ala Ser Arg Val Ala Val Ile Ser Gly Thr Cys His His Ala Gln Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe Cys Tyr Val Gly Gln Ala Gly Leu Arg Leu Leu Thr Ser Ser Asp Pro Pro Thr Ser Ala Ser Leu Ser Ala Gly Ile Ala Gly Leu Ser His Arg Ala Arg Pro Phe Cys Leu Phe Leu Cys Val Phe Glu Thr Val Ser His Ser Val Thr Gln Asn Gly Met Gln Trp Cys Asp His Ser Ser Leu Gln Ser Arg Pro Pro Gly Leu Lys Arg Ser Ser Pro Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg Gln Ala Ser Pro His Leu Ala Asn Tyr Phe Tyr Phe Phe Ile Arg Gly Lys Ala Ser Leu Cys Cys Pro Gly Trp Ser Gln Thr Pro Glu Leu Lys

<210> 3602

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3602

Met Cys Gln Thr Leu Arg His Pro Gly Gly Gln Pro Phe Pro Leu Val

1 5 10 15

Leu Arg Ala Gln Pro Ala Pro Gly Gln Leu Pro Val Pro Ala Ala Thr Pro Leu Leu Gly His Arg Leu Met Pro Glu Asn Ser Gln Glu Ser His Ala Met Phe Asn Glu Arg Gln Asn Val Gly Thr Arg Cys Glu Ala Val Pro Gly Cys Gly Arg Glu Thr Pro Gly Cys Ala Arg Gln Gly Ala Phe Pro Trp Thr Leu Lys Gly Thr Arg Cys Pro Gly Ala Val Arg Gly Gly Val Leu Ile His Val Thr Gly Leu Phe Gln <210> 3603 <211> 445 <212> PRT <213> Homo sapiens <400> 3603 Met Thr Gly Ser Ser Phe Ser Leu Ala His Leu Leu Ile Ile Ser Gly Leu Leu Cys Tyr Ser Ala Gly Cys Leu Ala Leu Pro Ser Leu Asp Gln Lys Lys Arg Gly Gly His Lys Ala Cys Cys Leu Leu Thr Pro Pro Pro Pro Pro Leu Phe Pro Pro Phe Phe Arg Gly Gly Arg Ser Pro Leu

Leu	Ser	Pro	Asp	Met	Lys	Asn	Leu	Met	Leu	Glu	Leu	Glu	Thr	Ser	Gln
65					70					75					80
Ser	Pro	Cys	Met	Gln	Gly	Ser	Leu	Gly	Ser	Pro	Gly	Pro	Pro	Gly	Pro
				85					90					95	
Gln	Gly	Pro	Pro	Gly	Leu	Pro	Gly	Lys	Thr	Gly	Pro	Lys	Gly	Glu	Lys
			100					105					110		
Gly	Glu	Leu	Gly	Arg	Pro	Gly	Arg	Lys	Gly	Arg	Pro	Gly	Pro	Pro	Gly
		115					120					125			
Val	Pro	Gly	Met	Pro	Gly	Pro	Ile	Gly	Trp	Pro	Gly	Pro	Glu	Gly	Pro
	130					135					140				
Arg	Gly	Glu	Lys	Gly	Asp	Leu	Gly	Met	Met	Gly	Leu	Pro	Gly	Ser	Arg
145					150					155					160
Gly	Pro	Met	Gly	Ser	Lys	Gly	Tyr	Pro	Gly	Ser	Arg	Gly	Glu	Lys	Gly
				165					170					175	
Ser	Arg	Gly	Glu	Lys	Gly	Asp	Leu	Gly	Pro	Lys	Gly	Glu	Lys	Gly	Phe
			180					185					190		
Pro	Gly	Phe	Pro	Gly	Met	Leu	Gly	Gln	Lys	Gly	Glu	Met	Gly	Pro	Lys
		195					200					205			
Gly	Glu	Pro	Gly	Ile	Ala	Gly	His	Arg	Gly	Pro	Thr	Gly	Arg	Pro	Gly
	210					215					220				
Lys	Arg	Gly	Lys	Gln	Gly	Gln	Lys	Gly	Asp	Ser	Gly	Val	Met	Gly	Pro
225					230					235					240
Pro	Gly	Lys	Pro	Gly	Pro	Ser	Gly	Gln	Pro	Gly	Arg	Pro	Gly	Pro	Pro
				245					250					255	
Gly	Pro	Pro	Pro	Ala	Gly	Gln	Leu	Ile	Met	Gly	Pro	Lys	Gly	Glu	Arg
			260					265					270		
Gly	Phe	Pro	Gly	Pro	Pro	Gly	Arg	Cys	Leu	Cys	Gly	Pro	Thr	Met	Asr
		275					280					285			
Val	Asn	Asn	Pro	Ser	Tvr	Glv	Glu	Ser	Val	Tvr	Glv	Pro	Ser	Ser	Pro

290 295 300

Arg Val Pro Val Ile Phe Val Val Asn Asn Gln Glu Glu Leu Glu Arg

305 310 315 320

Leu Asn Thr Gln Asn Ala Ile Ala Phe Arg Arg Asp Gln Arg Ser Leu 325 330 335

Tyr Phe Lys Asp Ser Leu Gly Trp Leu Pro Ile Gln Leu Thr Pro Phe 340 345 350

Tyr Pro Val Asp Tyr Thr Ala Asp Gln His Gly Thr Cys Gly Asp Gly 355 360 365

Leu Leu Gln Pro Gly Glu Glu Cys Asp Asp Gly Asn Ser Asp Val Gly 370 375 380

Asp Asp Cys Ile Arg Cys His Arg Ala Tyr Cys Gly Asp Gly His Arg 385 390 395 400

His Glu Gly Val Glu Asp Cys Asp Gly Ser Asp Phe Gly Tyr Leu Thr
405 410 415

Cys Glu Thr Tyr Leu Pro Gly Ser Tyr Gly Asp Leu Gln Cys Thr Gln
420 425 430

Tyr Cys Tyr Ile Asp Ser Thr Pro Cys Arg Tyr Phe Thr
435 440 445

<210> 3604

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3604

Met Glu Tyr Tyr Leu Ala Ile Lys Arg Asn Glu Val Met Ser Phe Ala 1 5 10 15 Ala Thr Trp Arg Lys Leu Glu Ala Ile Ser Leu Phe Phe Leu Arg Trp Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Ile Ser Ala His Cys Lys Leu His Leu Leu Gly Ser Arg His Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ala Ala Gly Ala Arg His His Ala Trp Leu Ile Phe Cys Ile Phe Ser Arg Asp Gly Phe Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Pro Gly Leu Val Ile Arg Leu Pro Arg Pro Pro Lys Val Leu Gly Leu Arg Ala Ser Ala Thr Ala Pro Gly Leu Glu Ala Phe Ile Leu Ser Glu Val Thr Pro Ala Trp Lys Thr Lys Asn His Met Phe Ser Leu Arg Ser Gly Ser <210> 3605

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3605

Met Phe Leu Glu Ile Ser Ser Tyr Tyr Asp Pro Gly Arg Leu Ile Cys

Asp Phe Pro Phe Asp Gly Leu Leu Glu Glu Arg Ala Leu Leu Gly

Arg Met Gly Lys His Glu Gln Ala Leu Phe Ile Tyr Val His Ile Leu Lys Asp Thr Arg Met Ala Glu Glu Tyr Cys His Lys His Tyr Asp Arg Asn Lys Asp Gly Ser Lys Asp Val Tyr Leu Ser Leu Leu Arg Met Tyr Leu Ser Pro Pro Ser Ile His Cys Leu Gly Pro Ile Lys Leu Glu Leu Leu Glu Pro Lys Ala Asn Leu Gln Ala Ala Leu Gln Val Leu Glu Leu His His Ser Lys Leu Asp Thr Thr Lys Ala Leu Asn Leu Leu Pro Ala Asn Thr Gln Ile Asn Asp Ile Arg Ile Phe Leu Glu Lys Val Leu Glu Glu Asn Ala Gln Lys Lys Arg Phe Asn Gln Val Leu Lys Asn Leu Leu His Ala Glu Phe Leu Arg Val Gln Glu Glu Arg Ile Leu His Gln Gln Val Lys Cys Ile Ile Thr Glu Glu Lys Val Cys Met Val Cys Lys Lys Ile Gly Asn Ser Ala Phe Ala Arg Tyr Pro Asn Gly Val Val His Tyr Phe Cys Ser Lys Glu Val Asn Pro Ala Asp Thr

<210> 3606

<211> 103

<212> PRT <213> Homo sapiens <400> 3606 Met Glu Leu Asn Gln Val Leu Ile Phe Tyr Phe His Lys Lys Glu Glu 5 10 1 15 Gly Phe Leu Phe Leu Asn Phe Tyr Tyr Tyr Tyr Phe Leu Arg Arg Ser 20 25 30 Leu Ile Leu Ser Pro Arg Leu Glu Tyr Ser Arg Ala Ile Leu Ala His 45 35 40 Cys Asn Leu Cys Leu Pro Gly Leu Gly Asn Ser His Ala Ser Ala Ser 50 55 60 Gln Val Val Gly Thr Ala Arg Leu Met Pro Pro Arg Leu Ala Gly Phe 75 65 70 80 Phe Val Phe Leu Val Glu Thr Gly Phe Arg Arg Gly Gly Pro Ala Gly 85 90 95 Leu Gly Thr Pro Gly Leu Arg 100

<210> 3607

<211> 224

<212> PRT

<213> Homo sapiens

<400> 3607

Met Arg Thr Ala Lys Asp Val Asn Arg Asp Leu Tyr Arg Met Lys Ser 1 5 10 15

Arg His Leu Leu Asp Met Asp Glu Gln Ser Lys Ala Trp Thr Ile Tyr

Arg Pro Glu Asp Ser Gly Arg Arg Ala Lys Ser Ala Ser Ile Ile Tyr Gln His Asn Pro Ile Asn Met Ile Cys Gln Asn Gly Pro Asn Ser Trp Ile Ser Ile Ala Asn Ser Glu Ala Ile Gln Ile Gly His Gly Asn Ile Ile Thr Arg Gln Thr Val Ser Arg Glu Asp Gly Ser Ala Gly Pro Arg His Leu Pro Ser Met Ala Pro Gly Asp Ser Ser Thr Trp Gly Thr Leu Val Asp Pro Trp Gly Pro Gln Asp Ile His Met Glu Arg Ser Ile Leu Arg Arg Val Gln Leu Gly His Ser Asn Glu Met Arg Leu His Gly Val Pro Ser Glu Gly Pro Ala His Ile Pro Pro Gly Ser Pro Pro Val Phe Gln Cys Ser Gly Lys Gln Ala Ala Glu Glu Arg Gly Ala Glu Ser Gln Arg Lys Thr Leu Thr Ser Arg Ser Ala Gly Arg Asp Gln Trp Gly Arg Pro Thr Ala Gly Ser Val Glu Gln Lys Asp Ala Ser Gln Thr Ala Gln

Gln His Glu Arg Ser Leu Cys His Cys Cys Arg Pro Arg Ser Phe Val

<210> 3608

<211> 591

<212> PRT

<213> Homo sapiens

<400> 3608

Met Pro Ile His Asp His Asp Ser Gly Val Glu Asp Glu Asp Phe Ser

1 5 10 15

Pro Arg Pro Ile Pro Ser Pro His Pro Val Ser Gln Lys Ile Ser Lys

20 25 30

Ile Gln Pro Ser Val Pro Glu Leu Ser Leu Val Leu Asp Gly Asn Phe

45

Ile Glu Ser Asn Pro Leu Pro Thr Pro Leu Glu Met Val Asn Asn Glu

50 55 60

Asn Pro Pro Leu Ile Asn His Leu Glu His Leu Lys Pro Leu Gln Pro 65 70 75 80

Gln Leu Tyr Asp Glu Lys His Ser Pro Glu Val Glu Ala Gly Glu Pro

85 90 95

Ser Leu Arg Gly Ile Pro Asn Gln Leu Asn Gln Asp Lys Pro Ala Leu
100 105 110

Leu Arg His Cys Lys Val Arg Gln Pro Pro Ala Tyr Lys Lys Gly Asn 115 120 125

Pro His Thr Arg Asn Ser Ile Lys Pro Ser Ser His Asn Gly Pro Phe 130 135 140

His Asp Ile Phe Glu Lys Leu Gln Thr Val Ser Ala Gly Asn Val Gln 145 150 155 160

Asn Glu Glu Tyr Pro Ile Arg Pro Ser Thr Leu Asn Ser Arg Gln Ser 165 170 175

Ser Leu Ala Pro Gln Ser Gln Pro His Asp Phe Val Phe Ser Pro His 180 185 190

Asn Ser Gly Arg Pro Met Glu Leu Gln Ile Pro Thr Pro Pro Leu Pro

		195					200					205			
Ser	Tyr	Cys	Ser	Thr	Asn	Val	Cys	Arg	Cys	Cys	Gln	His	His	Ser	His
	210					215					220				
Ile	Gln	Tyr	Ser	Pro	Leu	Asn	Ser	Trp	Gln	Gly	Ala	Asn	Thr	Val	Gly
225				•	230					235					240
Ser	Ile	Gln	Asp	Val	Gln	Ser	Glu	Ala	Leu	Gln	Lys	His	Ser	Leu	Phe
				245					250					255	
His	Pro	Ser	Gly	Cys	Pro	Ala	Leu	Tyr	Cys	Asn	Ala	Phe	Cys	Ser	Ser
			260					265					270		
Ser	Ser	Pro	Ile	Ala	Leu	Arg	Pro	Gln	Gly	Asp	Met	Gly	Ser	Cys	Ser
		275					280					285			
Pro	His	Ser	Asn	Ile	Glu	Pro	Ser	Pro	Val	Ala	Arg	Pro	Pro	Ser	His
	290					295					300				
Met	Asp	Leu	Cys	Asn	Pro	Gln	Pro	Cys	Thr	Val	Cys	Met	His	Thr	Pro
305					310					315					320
Lys	Thr	Glu	Ser	Asp	Asn	Gly	Met	Met	Gly	Leu	Ser	Pro	Asp	Ala	Tyr
				325					330					335	
Arg	Phe	Leu	Thr	Glu	Gln	Asp	Arg	Gln	Leu	Arg	Leu	Leu	Gln	Ala	Gln
			340					345					350		
Ile	Gln	Arg	Leu	Leu	Glu	Ala	Gln	Ser	Leu	Met	Pro	Cys	Ser	Pro	Lys
		355					360					365			
Thr	Thr	Ala	Val	Glu	Asp	Thr	Val	Gln	Ala	Gly	Arg	Gln	Met	Glu	Leu
	370					375					380				
Val	Ser	Val	Glu	Ala	Gln	Ser	Ser	Pro	Gly	Leu	His	Met	Arg	Lys	Gly
385					390					395					400
Val	Ser	Ile	Ala	Val	Ser	Thr	Gly	Ala	Ser	Leu	Phe	Trp	Asn	Ala	Ala
				405					410					415	
Gly	Glu	Asp	Gln	Glu	Pro	Asp	Ser	Gln	Met	Lys	Gln	Asp	Asp	Thr	Lys
			420					425					430		

Ile Ser Ser Glu Asp Met Asn Phe Ser Val Asp Ile Asn Asn Glu Val Thr Ser Leu Pro Gly Ser Ala Ser Ser Leu Lys Ala Val Asp Ile Pro Ser Phe Glu Glu Ser Asn Ile Ala Val Glu Glu Glu Phe Asn Gln Pro Leu Ser Val Ser Asn Ser Ser Leu Val Val Arg Lys Glu Pro Asp Val Pro Val Phe Pro Ser Gly Gln Leu Ala Glu Ser Val Ser Met Cys Leu Gln Thr Gly Pro Thr Gly Gly Ala Ser Asn Asn Ser Glu Thr Ser Glu Glu Pro Lys Ile Glu His Val Met Gln Pro Leu Leu His Gln Pro Ser Asp Asn Gln Lys Ile Tyr Gln Asp Leu Leu Gly Gln Val Asn His Leu Leu Asn Ser Ser Ser Arg Glu Thr Glu Gln Pro Ser Thr Lys Ala Val Ile Ile Ser His Glu Cys Thr Arg Thr Gln Asn Val Tyr His

<210> 3609

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3609

Met Arg Ala Asp Val Pro Gly Ser Cys Leu Gly Glu Arg Pro Ser Val

Trp Val Thr Ser Arg Leu His Thr Val Ser Leu Arg Leu Phe Leu Phe Ser His His Ser Ile Leu Met Ser Tyr Asp His Val Glu Leu Thr Phe Asn Asp Met Lys Asn Val Pro Glu Ala Phe Lys Gly Thr Lys Lys Gly Thr Val Tyr Leu Thr Pro Tyr Arg Val Ile Phe Leu Ser Lys Gly Lys Asp Ala Met Gln Ser Phe Met Met Pro Phe Tyr Leu Met Lys Asp Cys Glu Ile Lys Gln Pro Val Phe Gly Ala Asn Tyr Ile Lys Gly Thr Val Lys Ala Glu Ala Gly Gly Gly Trp Glu Gly Ser Ala Ser Tyr Lys Leu Thr Phe Thr Ala Gly Gly Ala Ile Glu Phe Gly Gln Arg Met Leu Gln Val Ala Ser Gln Gly Ile Gln Ala Pro Lys Ile Arg Gly

<210> 3610

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3610

Met Gln Thr Ala Ser Gly Gly Pro Gln Pro Arg Leu Ser Ala Val Glu

1 5 10 15

Val	Glu	Ala	Glu	Ala	Gly	Arg	Leu	Arg	Lys	Ala	Cys	Ser	Leu	Leu	Arg
			20					25					30		
Leu	Arg	Met	Arg	Glu	Glu	Leu	Ser	Ala	Gly	Gln	Trp	Val	Leu	Gly	Leu
		35					40					45			
Tyr	Gln	Glu	Glu	Cys	Gly	Gly	Pro	Val	Gln	Gly	Gly	Phe	Pro	Asp	Cys
	50					55					60				
His	Gly	Pro	His	Leu	Leu	Ser	Leu	Thr	Leu	Leu	Gln	Pro	Pro	Trp	Thr
65					70					75					80
Gly	Cys	Arg	Ser	Thr	Ala	Ala	Cys	Ser	Arg	Trp	Arg	Gly	Cys	Arg	Pro
				85					90					95	
Trp	Trp	Ala	Ser	Val	Cys	Thr	Gly	Cys	Arg	Ser	Cys	Val	Gln	Arg	Trp
			100					105					110		
Arg	Asn	Ser	His	Gln	Asp	His	Val	Leu	Trp	Gly	Gly	Pro	Pro	Glu	Pro
		115					120					125			
Arg	Arg	Pro	Val	Gly	Val	Glu	Arg	Ser	Leu	His	Gly	Ala	Pro	Ser	Cys
	130					135					140				
Leu	Ser	Thr	Pro	Ala	Pro	Arg	Ser	Cys	Arg	Pro	Trp	Arg	Pro	Ser	Ser
145					150					155					160
Cys	Glu	Trp	Leu	Cys	Trp	Thr	Ser	Arg	Ser	Thr	Trp	Lys	Arg	Cys	Phe
				165					170					175	
Trp	Lys	Arg	Arg	Trp	Gly	Cys	Asn	Arg	Gly	Pro	Gln	Pro			
			180					185							

<210> 3611

<211> 160

<212> PRT

<213> Homo sapiens

<400> 3611

Met Gly Phe Gly Ala Gly Ile His Leu Leu Lys Tyr Cys Phe Phe Pro

1 5 10 15

Ser Arg Leu Gly Pro Gly Thr Cys Leu Ser Gly Cys Ser Val Ala Pro

20 25 30

Ser Leu Leu Arg Pro Gly Arg Lys Leu Arg Ile Arg Ala Ala Ser Gly

35 40 45

Pro Ser Pro Arg Trp Cys Ser Gly Gly Gln Ala Cys Arg Pro Leu Ser

50 55 60

Trp Ala Arg Ser Gly Asp Ile Pro Glu Lys Leu Trp Gly Pro Thr Ala

65 70 75 80

Phe Cys Gly Gly Arg Lys Gly Lys Gly Trp Gly Lys Val Thr Glu Thr

85 90 95

Lys Arg Gln Thr Gln Arg Arg Thr Glu Pro Asn Gly Tyr Asp Ala Phe

100 105 110

Pro Pro Lys Arg Gly Arg Trp Asp Lys Arg Gly Trp Glu Ile Lys Ala

115 120 125

Ser Glu Ala Ser Asp Lys Lys Thr Glu Pro Pro Cys Lys Gly Arg His

130 135 140

Ser Val Lys Val Gly Gly Lys Ala Ser Ile Ile Lys Ala Leu Cys Arg

145 150 155 160

<210> 3612

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3612

Met Gln Thr Leu Gly Ile Ser Leu Ser Gln Leu Ala Pro Pro Ala Gly 1 10 15 Arg Lys Phe Pro Leu Ser Ser Gln Phe Phe Leu Leu Lys Asn Glu Gly 25 20 30 Leu Tyr Ala Arg Phe Ser Ser Trp Pro Val Val Pro Arg Glu Gly Gln 35 40 45 Glu Gly Thr Leu Asp Asn Ser His Met His Leu Thr Asp Glu Glu Thr 50 55 60 Glu Thr Gln Ser Arg His Ile Asn Thr Ser Phe Asp Leu His Lys Ser 65 70 75 80 Thr Trp Arg Arg Gly Val Gly Cys Leu Cys Leu Phe Lys Phe Phe 85 95 90 Val Lys Lys Met Lys Ile Gly Ile Leu 100 105 <210> 3613 <211> 427 <212> PRT <213> Homo sapiens

400> 3613
Met Trp Thr Arg Ala Trp Cys Val Tyr Gly Arg Arg Gly Gln Lys Ser
1 5 10 15
Pro Thr Val Ser Leu Trp Ser Phe Leu Ile Gln Leu Tyr Pro Pro Phe
20 25 30
Leu Pro Leu Pro Ser Leu Glu Asp His Lys Leu Val Phe Leu Gln Gln
35 40 45
Gly Pro Leu Leu Leu Leu Val Ala Met Ser Arg Thr Ser Gln Ser Ala Ala

	50					55					60				
Gln	Leu	Arg	Gly	Glu	Leu	Leu	Ala	Val	His	Ala	Gln	Ile	Val	Ser	Thr
65					70					75					80
Leu	Thr	Arg	Ala	Ser	Val	Ala	Arg	Ile	Phe	Ala	His	Lys	Gln	Asn	Tyr
				85					90					95	
Asp	Leu	Arg	Arg	Leu	Leu	Ala	Gly	Ser	Glu	Arg	Thr	Leu	Asp	Arg	Leu
			100					105					110		
Leu	Asp	Ser	Met	Glu	Gln	Asp	Pro	Gly	Ala	Leu	Leu	Leu	Gly	Ala	Val
		115					120					125			
Arg	Cys	Val	Pro	Leu	Ala	Arg	Pro	Leu	Arg	Asp	Ala	Leu	Gly	Ala	Leu
	130					135					140				
Leu	Arg	Arg	Cys	Thr	Ala	Pro	Gly	Leu	Ala	Leu	Ser	Val	Leu	Ala	Val
145					150					155					160
Gly	Gly	Arg	Leu	Ile	Thr	Ala	Ala	Gln	Glu	Arg	Asn	Val	Leu	Ala	Glu
				165					170					175	
Cys	Arg	Leu	Asp	Pro	Ala	Asp	Leu	Gln	Leu	Leu	Leu	Asp	Trp	Val	Gly
			180					185					190		
Ala	Pro	Ala	Phe	Ala	Ala	Gly	Glu	Ala	Trp	Ala	Pro	Val	Cys	Leu	Pro
		195					200					205			
Arg	Phe	Asn	Pro	Asp	Gly	Phe	Phe	Tyr	Ala	Tyr	Val	Ala	Arg	Leu	Asp
	210					215					220				
Ala	Met	Pro	Val	Cys	Leu	Leu	Leu	Leu	Gly	Thr	Gln	Arg	Glu	Ala	Phe
225					230					235					240
His	Ala	Met	Ala	Ala	Cys	Arg	Arg	Leu	Val	Glu	Asp	Gly	Met	His	Ala
				245					250					255	
Leu	Gly	Ala	Met	Arg	Ala	Leu	Gly	Glu	Ala	Ala	Ser	Phe	Ser	Asn	Ala
			260					265					270		
Ser	Ser	Ala	Ser	Ala	Pro	Ala	Tyr	Ser	Val	Gln	Ala	Val	Gly	Ala	Pro
		275					280					285			

Gly Leu Arg His Phe Leu Tyr Lys Pro Leu Asp Ile Pro Asp His His 290 295 300 Arg Gln Leu Pro Gln Phe Thr Ser Pro Glu Leu Glu Ala Pro Tyr Ser 310 305 315 320 Arg Glu Glu Glu Arg Gln Arg Leu Ser Asp Leu Tyr His Arg Leu His 325 330 335 Ala Arg Leu His Ser Thr Ser Arg Pro Leu Arg Leu Ile Tyr His Val 350 340 345 Ala Glu Lys Glu Thr Leu Leu Ala Trp Val Thr Ser Lys Phe Glu Leu 355 360 365 Tyr Thr Cys Leu Ser Pro Leu Val Thr Lys Ala Gly Ala Ile Leu Val 370 375 380 Val Thr Lys Leu Leu Arg Trp Val Lys Lys Glu Glu Asp Arg Leu Phe 385 390 395 400 Ile Arg Tyr Pro Pro Lys Tyr Ser Thr Pro Pro Ala Thr Ser Thr Asp 405 410 415 Gln Ala Ala His Asn Gly Leu Phe Thr Gly Leu 420 425

<210> 3614

<211> 112

<212> PRT

<213> Homo sapiens .

<400> 3614

Met Ser Asn Asp Arg Arg Trp Ala Ile Leu Ser Gly Asn Phe Gln Thr

1 5 10 15

Pro Pro Pro Gly Arg Lys Glu Cys Leu Val Thr Ser Leu Arg Gly Glu

20 25 30 Arg Cys Leu Ser Ser Pro Leu Pro Val Cys Pro Gly Arg Asp Val His 35 40 45 Thr Leu Arg Tyr Arg Glu Asp Ser Ser Gly Glu Lys Pro Gln Ala Ser 50 55 60 Leu Ser Ala Gln Gly Ile Gly Gly Pro Gln Pro Ala Pro Ser Ser Glu 75 65 70 80 Gln His Thr Ala Phe Lys Gly Leu Tyr Cys Cys Ser Tyr Pro Ala Glu 85 90 95

Ala Leu His Gln Ala Ser Pro Cys Lys Ser Val Ser Pro Gln Arg Arg
100 105 110

<210> 3615

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3615

Met Ala Thr Val Asp Pro Ala Gly Leu Ala Leu His Pro Ala Cys Pro

1 5 10 15

Arg Val Trp Gly Pro Ser Asp Gln His Arg Pro Pro Gln Glu Gly Ser
20 25 30

His Leu Pro Ala Arg Arg Gly Leu Ala Arg Asn Gln Ser Cys Gln
35 40 45

His Pro Asp Leu Gly Pro Pro Ala Ser Arg Thr Glu Lys Glu Met Ser 50 55 60

Ala Val Ala Ala Pro Gly Cys Ala Ala Leu Leu Gln Pro Pro Gln Gln 65 70 75 80

Thr Ser Val Gln Ser Phe Lys Gly Met Ser Leu Ser Val Glu Ala Gly 90 85 95 Leu Cys Gly Glu Pro Ala Gly Lys Leu Leu Gly Glu Gly Gly Gln 105 100 110 Arg Glu Ala Ser Leu Val Gly Lys Lys Gly Trp Glu Trp Arg Arg His 125 120 115 Arg Gly Arg Thr Leu Ser Glu Glu Asp Gln Gly Ala Arg Pro Phe Ser 130 135 140 Pro Gly Ser Cys Ala Leu Arg Gly Asp Arg Glu Gly Gly Ile Gly 150 145 155

<210> 3616

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3616

Met Lys Gly Thr Pro Ser Ser Leu Asp Thr Leu Met Trp Ile Tyr His

1 5 10 15

Phe His Ser Ser Thr Glu Val Ala Leu Gln Pro Pro Leu Leu Ser Ser 20 25 30

Leu Glu Leu Ser Val Ala Ala Ala His Glu Tyr Leu Glu Gln Arg Phe
35 40 45

Arg Glu Leu Lys Ser Leu Glu Pro Pro Glu Pro Lys Met Gln Gly Met
50 55 60

Leu Pro Ala Pro Lys Pro Thr Leu Gly Leu Val Leu Arg Glu Ala Thr 65 70 75 80

Ala Ser Leu Val Ser Phe Gly Thr Thr Leu Leu Glu Ile Ser Ala Leu

Trp Leu Gln Gln Glu Ala Arg Arg Leu Asp Gly Ser Ala Gly Pro Ala Pro Asp Gly Arg Asp Pro Gly Ala Ala Leu Ser Arg Val Ala Gln Ala Ala Gly Gln Gly Val Arg Gln Ala Gly Ala Ala Val Gly Ala Ser Ala Arg Leu Leu Val Gln Gly Ala Trp Leu Cys Leu Cys Gly Arg Gly Leu Gln Gly Ser Ala Ser Phe Leu Arg Gln Ser Gln Gln Gln Leu Gly Leu Gly Ile Pro Gly Glu Pro Val Ser Ser Gly His Gly Val Ser

<210> 3617

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3617

Met Tyr Met Tyr Met Cys Met Cys Val Tyr Val His Ile Tyr Thr Cys Ile Tyr Val Tyr Thr His Thr Tyr Ile Tyr Thr Tyr Thr Cys Met Tyr Val Cys Ile Tyr Ser His Thr Tyr Ile His Thr His Val Tyr Val Cys Val His Ile His Ile Cys Ile His Met Tyr Met Cys Val Tyr Thr His

Ile	Tyr	Ala	Cys	Thr	Cys	Val	Cys	Val	Cys	Val	His	Thr	His	Thr	Tyr
65					70					75					80
Thr	Cys	Ile	Cys	Val	Cys	Val	His	Thr	His	Ile	Tyr	Ile	His	Met	Cys
				85					90					95	
Val	Cys	Val	Tyr	Thr	Arg	Ile	Tyr	Thr	Tyr	Thr	Cys	Val	Cys	Val	Cys
			100					105					110		
Thr	His	Ala	Tyr	Ile	His	Thr	His	Val	Cys	Val	Cys	Val	His	Thr	His
		115					120					125			
Ile	Tyr	Ile	His	Met	Tyr	Val	Cys	Val	Tyr	Thr	Arg	Ile	Tyr	Thr	Tyr
	130					135					140				
Thr	Cys	Val	Cys	Val	Cys	Thr	His	Ala	Tyr	Ile	His	Thr	His	Val	Tyr
145					150					155					160
Val	Cys	Val	His	Thr	His	Ile	Tyr	Ile	His	Met	Cys	Val	Cys	Val	Tyr
				165					170					175	
Thr	Arg	Ile	Tyr	Thr	Tyr	Thr	Cys	Met	Cys	Val	Cys	Val	His	Thr	His
			180					185					190		
Ile	Tyr	Ile	His	Met	Tyr	Val	Cys	Val	Cys	Thr	His	Ala	Tyr	Ile	His
		195					200					205			
Thr	His	Val	Tyr	Val	Cys	Val	Tyr	Thr	Arg	Ile	Tyr	Thr	Tyr	Thr	Cys
	210					215					220				
Met	Cys	Val	Cys	Val	Tyr	Thr	Arg	Ile	Tyr	Thr	Tyr	Thr	Tyr	Val	Cys
225					230					235					240
Val	Cys	Thr	His	Ala	Tyr	Ile	His	Thr	Gln	Val	Tyr	Val	Cys	Val	Cys
				245					250					255	
Thr	His	Ala	Tyr	Ile	His	Thr	His	Val	Cys	Val	Cys	Val	Tyr	Thr	Tyr
			260					265					270		
Thr	Tyr	Met	Tyr	Thr	Leu	Trp	Cys	Arg	Gly	Thr	Ile	Ile	Ala	His	Cys
		275					280					285			
Thr	Len	Glu	Leu	Ara	G1v	Leu	Ser	Asn	Pro	Ala	Ala	Ser	Ala	Ser	

290 295 300

<210> 3618

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3618

Met Thr His Thr Leu Pro Thr Ser Ser Gln Gly His Trp Ile Ile Ile

1 5 10 15

Leu Val Arg Pro Ile Phe Thr Ile Tyr Leu Tyr Tyr Phe Leu Arg Arg

20 25 30

Gly Leu Pro Leu Leu Pro Arg Leu Glu Cys Ser Gly Val Ile Gly Leu

35 40 45

Thr Ala Ala Leu Ala Tyr Arg Leu Lys Arg Ser Ser Cys Phe Ser Leu

50 55 60

Leu Ile Ala Gly Thr Ala Cys Gly Tyr His His Thr Trp Leu Ile Phe

65 70 75 80

Lys Ile Leu Val Glu Thr Gly Ser Pro Phe Val Ser Arg Ala Gly Leu

85 90 95

Glu Leu Leu Gly Ser Gly Ala Pro Leu Ala Ser Ala Ser Gln His Val

100 105 110

Gly Ile Thr Gly Val Ser Gln His Ile Gln Pro Pro Phe Thr Leu Leu

115 120 125

Val Leu Ile His Leu Asp Gln His Phe Ser Lys Gly Glu Gly Ser Met

130 135 140

Glu Tyr Ile Ser Thr Arg His Gln

<210> 3619 <211> 180 <212> PRT <213> Homo sapiens <400> 3619 Met Leu Glu Gly Val Ser Asn Glu Phe Asp His Phe Gly Ile Ser Leu Pro Leu Lys Ile Cys Leu His Leu Gly Trp Asp Glu Gly Leu Val Glu Gly Lys Val Val Arg Leu Gly Gln Gly Ile Gly Lys Ser Ile Cys Ser Ser Cys Gln Leu Phe Glu Glu Ala Pro Thr Gln Met Ser Thr Val Pro Ser Gly Leu Pro Leu Pro Ile Leu Met His Leu Cys Leu Leu Pro Val

Cys Met Ala His Leu Cys Pro Ala Ser Pro Cys Tyr Phe Gly Ala Thr

Pro Gly Ser Gly Lys Phe Cys Arg Leu Ile Thr Tyr Ser His Ser Ser

Pro Gln Leu Ala Ala Ser Leu Arg His Arg Gly Arg Glu Val Gly Lys

Asp Leu Pro Tyr Pro Gly Leu Cys Pro Leu Thr Phe His Pro Ser Phe

Phe Pro Pro Val Glu Gly Cys Val Ser Ser Leu Pro Gly Lys Leu Leu

Ser Pro Gln Thr Ile Phe Phe Gln Ile Leu Trp Leu Tyr Ser Lys Ser

165 170 175

Ser Leu Val Leu

180

<210> 3620

<211> 649

<212> PRT

<213> Homo sapiens

<400> 3620

Met Trp Leu Phe Phe Gly Ile Thr Gly Leu Leu Thr Ala Ala Leu Ser

1 5 10 15

Gly His Pro Ser Pro Ala Pro Pro Asp Gln Leu Asn Thr Ser Ser Ala

20 25 30

Glu Ser Glu Leu Trp Glu Pro Gly Glu Arg Leu Pro Val Arg Leu Thr

35 40 45

Asn Gly Ser Ser Ser Cys Ser Gly Thr Val Glu Val Arg Leu Glu Ala

50 55 60

Ser Trp Glu Pro Ala Cys Gly Ala Glu Ala Ala Ser Gln Leu Ala Pro

65 70 75 80

Pro Thr Pro Glu Leu Pro Pro Pro Pro Ala Ala Gly Asn Thr Ser Val

85 90 95

Ala Ala Asn Ala Thr Leu Ala Gly Ala Pro Ala Leu Leu Cys Ser Gly

100 105 110

Ala Glu Trp Arg Leu Cys Glu Val Val Glu His Ala Cys Arg Ser Asp

115 120 125

Gly Arg Arg Ala Arg Val Thr Cys Ala Glu Asn Arg Ala Leu Arg Leu

130 135 140

Val	Asp	Gly	Gly	Gly	Ala	Cys	Ala	Gly	Arg	Val	Glu	Met	Leu	Glu	His
145					150					155					160
Gly	Glu	Trp	Gly	Ser	Val	Cys	Asp	Asp	Thr	Trp	Asp	Leu	Glu	Asp	Ala
				165					170					175	
His	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Trp	Ala	Val	Gln	Ala	Leu
			180					185					190		
Pro	Gly	Leu	His	Phe	Thr	Pro	Gly	Arg	Gly	Pro	Ile	His	Arg	Asp	Gln
		195					200					205			
Val	Asn	Cys	Ser	Gly	Ala	Glu	Ala	Tyr	Leu	Trp	Asp	Cys	Pro	Gly	Leu
	210					215					220				
Pro	Gly	Gln	His	Tyr	Cys	Gly	His	Lys	Glu	Asp	Ala	Gly	Ala	Val	Cys
225					230					235					240
Ser	Glu	His	Gln	Ser	Trp	Arg	Leu	Thr	Gly	Gly	Ala	Asp	Arg	Cys	Glu
				245					250					255	
Gly	Gln	Val	Glu	Val	His	Phe	Arg	Gly	Val	Trp	Asn	Thr	Val	Cys	Asp
			260					265					270		
Ser	Glu	Trp	Tyr	Pro	Ser	Glu	Ala	Lys	Val	Leu	Cys	Gln	Ser	Leu	Gly
		275					280					285			
Cys	Gly	Thr	Ala	Val	Glu	Arg	Pro	Lys	Gly	Leu	Pro	His	Ser	Leu	Ser
	290					295					300				
Gly	Arg	Met	Tyr	Tyr	Ser	Cys	Asn	Gly	Glu	Glu	Leu	Thr	Leu	Ser	Asn
305					310					315					320
Cys	Ser	Trp	Arg	Phe	Asn	Asn	Ser	Asn	Leu	Cys	Ser	Gln	Ser	Leu	Ala
				325					330					335	
Ala	Arg	Val	Leu	Cys	Ser	Ala	Ser	Arg	Ser	Leu	His	Asn	Leu	Ser	Thr
			340					345					350		
Pro	Glu	Val	Pro	Ala	Ser	Val	Gln	Thr	Val	Thr	Ile	Glu	Ser	Ser	Val
		355					360					365			
Thr	Val	Ive	Πρ	Glu	Asn	Lve	Glu	Ser	Aro	Glu	Leu	Met	Leu	Leu	Tle

	370					375					380				
Pro	Ser	Ile	Val	Leu	Gly	Ile	Leu	Leu	Leu	Gly	Ser	Leu	Ile	Phe	Ile
385					390					395					400
Ala	Phe	Ile	Leu	Leu	Arg	Ile	Lys	Gly	Lys	Tyr	Ala	Leu	Pro	Val	Met
				405					410					415	
Val	Asn	His	Gln	His	Leu	Pro	Thr	Thr	Ile	Pro	Ala	Gly	Ser	Asn	Ser
			420					425					430		
Tyr	Gln	Pro	Val	Pro	Ile	Thr	Ile	Pro	Lys	Glu	Val	Phe	Met	Leu	Pro
		435					440					445			
Ile	Gln	Val	Gln	Ala	Pro	Pro	Pro	Glu	Asp	Ser	Asp	Ser	Gly	Ser	Asp
	450					455					460				
Ser	Asp	Tyr	Glu	His	Tyr	Asp	Phe	Ser	Ala	Gln	Pro	Pro	Val	Ala	Leu
465					470					475					480
Thr	Thr	Phe	Tyr	Asn	Ser	Gln	Arg	His	Arg	Val	Thr	Asp	Glu	Glu	Val
				485					490					495	
Gln	Gln	Ser	Arg	Phe	Gln	Met	Pro	Pro	Leu	Glu	Glu	Gly	Leu	Glu	Glu
			500					505					510		
Leu	His	Ala	Ser	His	Ile	Pro	Thr	Ala	Asn	Pro	Gly	His	Cys	Ile	Thr
		515					520					525			
Asp	Pro	Pro	Ser	Leu	Gly	Pro	Gln	Tyr	His	Pro	Arg	Ser	Asn	Ser	Glu
	530					535					540				
Ser	Ser	Thr	Ser	Ser	Gly	Glu	Asp	Tyr	Cys	Asn	Ser	Pro	Lys	Ser	Lys
545					550					555					560
Leu	Pro	Pro	Trp	Asn	Pro	Gln	Val	Phe	Ser	Ser	Glu	Arg	Ser	Ser	Ph€
				565					570					575	
Leu	Glu	Gln	Pro	Pro	Asn	Leu	Glu	Leu	Ala	Gly	Thr	Gln	Pro	Ala	Phe
			580					585					590		
Ser	Ala	Gly	Pro	Pro	Ala	Asp	Asp	Ser	Ser	Ser	Thr	Ser	Ser	Gly	Glu
		595					600					605			

Trp Tyr Gln Asn Phe Gln Pro Pro Pro Gln Pro Pro Ser Glu Glu Gln 610 615 620

Phe Gly Cys Pro Gly Ser Pro Ser Pro Gln Pro Asp Ser Thr Asp Asn 625 630 630 635 640

Asp Asp Tyr Asp Asp Ile Ser Ala Ala 645

<210> 3621

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3621

Met Leu Ile Ser Asn Cys Trp Asp Thr Ser Arg Gly Lys Phe Leu Cys

1 5 10 15

Gly Phe Gly Gly Leu Ile Thr His Gly Pro His Gln Asp Ala Gly Leu

20 25 30

Glu Arg Thr Leu Thr Val Thr Leu Pro Gly Phe Met Lys Phe Pro Arg

40

45

Leu Arg Ser Ser Ser Gly Gln Lys His Thr Val Arg Gly Gly Phe Ala
50 55 60

Phe Phe Thr Val Leu Ser Gln Val Arg Pro Gln Ile Cys Ala Leu Gln 65 70 75 80

Ile Leu His Lys Glu Pro Arg Gly Ser Pro His Ala Gln His Trp Ala 85 90 95

Arg Phe Pro Ala Glu Glu Thr Met Ala Gly Arg Ala
100 105

<210> 3622

<211> 541

<212> PRT

<213> Homo sapiens

<400> 3622

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp

1 5 10 15

Val Leu Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys
20 25 30

Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Asp Ser Ile
35 40 45

Ser Ser Gly Ala Tyr Tyr Trp Ser Trp Val Arg Gln Tyr Pro Gly Lys
50 55 60

Ser Leu Glu Tyr Ile Gly Tyr Ile Ser Tyr Ser Gly Asn Thr His Tyr
65 70 75 80

His Pro Ser Leu Lys Ser Arg Leu Thr Met Ser Val Asp Thr Ser Asn 85 90 95

Asn Gln Phe Ser Leu Lys Leu Thr Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Arg Ser Leu Thr Met Phe Gly Gly Val Val Ala 115 120 125

Val Pro Ser Phe Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
130 135 140

Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys 145 150 155 160

Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys
165 170 175

Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu
			180					185					190		
Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu
		195					200					205			
Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Thr	Ser	Ser	Asn	Phe	Gly	Thr
	210					215					220				
Gln	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro	Ser	Asn	Thr	Lys	Val
225					230					235					240
Asp	Lys	Thr	Val	Glu	Arg	Lys	Cys	Cys	Val	Glu	Cys	Pro	Pro	Cys	Pro
				245					250					255	
Ala	Pro	Pro	Val	Ala	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro
			260					265					270		
Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val
		275					280					285			
Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln	Phe	Asn	Trp	Tyr	Val
	290					295					300				
Asp	Gly	Met	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln
305					310					315					320
Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Val	His	Gln
				325					330					335	
Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Gly
			340					345					350		
Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Thr	Lys	Gly	Gln	Pro
		355					360					365			
Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu	Met	Thr
	370					375					380				
Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser
385					390					395					400
Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr

Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Glu Leu Gln Leu Glu Glu Ser Cys Ala Glu Ala Gln Asp Gly Glu Leu Asp Gly Leu Trp Thr Thr Ile Thr Ile Phe Ile Thr Leu Phe Leu Leu Ser Val Cys Tyr Ser Ala Thr Ile Thr Phe Phe Lys Val Lys Trp Ile Phe Ser Ser Val Val Asp Leu Lys Gln Thr Ile Val Pro Asp Tyr Arg Asn Met Ile Arg Gln Gly Ala

<210> 3623

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3623

Met Lys Cys Tyr His Val Trp Cys Leu Leu Arg Thr Thr Leu Leu Cys

1 5 10 15

Ile Lys Lys Ser Ile Ile Thr Trp Ser Val Thr Leu Arg Leu Ser Phe
20 25 30

Val Phe Glu Gln His Asp Val Glu Ile Asn Lys Ile Ile Ser Thr Thr Ala Ser Lys Thr Glu Thr Pro Ile Val Ser Lys Ser Leu Ser Ser Ser Leu Asp Asp Thr Glu Val Lys Lys Val Met Glu Glu Cys Lys Arg Leu Gln Gly Glu Val Gln Arg Leu Arg Glu Glu Asn Lys Gln Phe Lys Glu Glu Asp Gly Leu Arg Met Arg Lys Thr Val Gln Ser Asn Ser Pro Ile Ser Ala Leu Ala Pro Thr Gly Lys Glu Glu Gly Leu Ser Thr Arg Leu Leu Ala Leu Val Val Leu Phe Phe Ile Val Gly Val Ile Ile Gly Lys Ile Ala Leu <210> 3624 <211> 135 <212> PRT <213> Homo sapiens <400> 3624 Met Ala Ser Asp Glu Gly Lys Leu Phe Val Gly Gly Leu Ser Phe Asp Thr Asn Glu Gln Ser Leu Glu Gln Val Phe Ser Lys Tyr Gly Gln Ile

Ser Glu Val Val Val Lys Asp Arg Glu Thr Gln Arg Ser Arg Gly

40 35 45 Phe Gly Phe Val Thr Phe Glu Asn Ile Asp Asp Ala Lys Asp Ala Met 50 55 60 Met Ala Met Asn Gly Lys Val Arg Ile Arg Val Leu Ser Arg Ser Leu 65 70 75 80 Val Ser Arg Met Gly His Pro Pro Ala Asn Pro Ser Arg Pro Leu Ser 90 95 85 Pro Val Cys Arg Trp Thr Ala Asp Pro Ser Arg Pro Gly Arg Arg Arg 100 105 110 Gly Pro Arg Leu Trp Gly Glu Pro Val Arg Val Gln Glu Trp Gly Leu 115 120 125 Arg Arg Leu Gln Arg Leu Leu 130 135 <210> 3625 <211> 105 <212> PRT <213> Homo sapiens

<400> 3625

Met Thr Gly Ser Val Tyr Asn Lys Thr Gln Thr Phe Asp Lys Gln Gly

1 5 10 15

Phe His Ala Gly Thr Pro Pro Pro Phe Ser Leu Pro Ser Val Leu Gly

20 25 30

Ser Thr Gly Pro Leu Ala Ser Gly Ala Ala Pro Gly Tyr Ala Pro Pro

35 40 45

Pro Phe Leu His Ile Leu Pro Ala His Gln Gln Pro His Ser Gln Leu 50 55 60

Leu His His His Leu Pro Gln Asp Ala Gln Ser Gly Ser Gly Gln Arg
65 70 75 80

Ser Gln Pro Ser Ser Leu Gln Pro Lys Ser Gln Ala Ser Lys Pro Ala
85 90 95

Tyr Gly Asn Ser Pro Tyr Trp Thr Asn
100 105

<210> 3626

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3626

Met Gly Ile Asp Leu Lys Cys Leu Trp Asp Lys Lys His Asp Ile Ala

1 5 10 15

Leu Phe Cys Ser Leu Ser Val Gln Asn Arg Lys Cys Leu Gly Met Gln
20 25 30

Lys Cys Lys Ser Ser Gln Leu Tyr Phe Trp Cys Val Leu Cys Val Phe
35 40 45

Arg Phe Ser His Ile Ser Asn Thr Val Arg Thr Leu Cys Gly Gln Ala
50 55 60

Gln Trp Leu Thr Leu Ile Ile Pro Ala Leu Trp Glu Ala Lys Val Gly
65 70 75 80

Gly Leu Leu Glu Pro Trp Glu Phe Lys Thr Ser Leu Gly Asn Ile Val 85 90 95

Arg Pro Cys Leu Tyr Lys Lys

<210> 3627

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3627

Met Ile Ser Ser Pro Gly Phe Ile Glu Gly Pro Ala Leu Ala Arg Pro 1 5 10 15

Pro Ala Ser Gly Gln His Thr Leu Ser Val Ala Arg Trp Leu Cys Thr
20 25 30

Glu Lys Ala Leu Gln Ala Ala Ser Leu Trp Thr Leu Leu Ile Arg Asn 35 40 45

Arg Pro Gly Ala Pro Gly Arg Arg Ala Asp Thr Trp Gln Gly Ile Ala
50 55 60

Gly Val Arg Gly Met Gln Gly Ser Ser Ser Cys Trp Val Pro Gly Ser 65 70 75 80

Val Pro Leu His Arg Ala Leu Asn Pro Ser His Ala Cys Thr Glu Ala 85 90 95

Leu Phe Pro Ser Glu Val Pro 100

<210> 3628

<211> 800

<212> PRT

<213> Homo sapiens

<400> 3628

Met	Ala	Gly	Glu	Leu	Ala	Asp	Lys	Lys	Asp	Arg	Asp	Ala	Ser	Pro	Ser
1				5					10					15	
Lys	Glu	Glu	Arg	Lys	Arg	Ser	Arg	Thr	Pro	Asp	Arg	Glu	Arg	Asp	Arg
			20					25					30		
Asp	Arg	Asp	Arg	Lys	Ser	Ser	Pro	Ser	Lys	Asp	Arg	Lys	Arg	His	Arg
		35					40					45			
Ser	Arg	Asp	Arg	Arg	Arg	Gly	Gly	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
	50					55					60				
Ser	Lys	Ser	Ala	Glu	Arg	Glu	Arg	Arg	His	Lys	Glu	Arg	Glu	Arg	Asp
65					70					75					80
Lys	Glu	Arg	Asp	Arg	Asn	Lys	Lys	Asp	Arg	Asp	Arg	Gly	Lys	Asp	Phe
				85					90					95	
Lys	Ser	Arg	Lys	Asp	Arg	Asp	Ser	Lys	Lys	Asp	Glu	Glu	Asp	Glu	His
			100					105					110		
Gly	Asp	Lys	Lys	Pro	Lys	Ala	Gln	Pro	Leu	Ser	Leu	Glu	Glu	Leu	Leu
		115					120					125			
Ala	Lys	Lys	Lys	Ala	Glu	Glu	Glu	Ala	Glu	Ala	Lys	Pro	Lys	Phe	Leu
	130					135					140				
Ser	Lys	Ala	Glu	Arg	Glu	Ala	Glu	Ala	Leu	Lys	Arg	Arg	Gln	Gln	Glu
145					150					155					160
Val	Glu	Glu	Arg	Gln	Arg	Met	Leu	Glu	Glu	Glu	Arg	Lys	Lys	Arg	Lys
				165					170					175	
Gln	Phe	Gln	Asp	Leu	Gly	Arg	Lys	Met	Leu	Glu	Asp	Pro	Gln	Glu	Arg
			180					185					190		
Glu	Arg	Arg	Glu	Arg	Arg	Glu	Arg	Met	Glu	Arg	Glu	Thr	Asn	Gly	Asn
		195					200					205			
Glu	Asp	Glu	Glu	Gly	Arg	Gln	Lys	Ile	Arg	Glu	Glu	Lys	Asp	Lys	Ser
	210					215					220				
Lvs	Glu	Leu	His	Ala	He	Lvs	Glu	Arg	Tvr	Leu	Glv	Glv	He	Lvs	Lvs

225					230					235					240
Arg	Arg	Arg	Thr	Arg	His	Leu	Asn	Asp	Arg	Lys	Phe	Val	Phe	Glu	Trp
				245					250					255	
Asp	Ala	Ser	Glu	Asp	Thr	Ser	Ile	Asp	Tyr	Asn	Pro	Leu	Tyr	Lys	Glu
			260					265					270		
Arg	His	Gln	Val	Gln	Leu	Leu	Gly	Arg	Gly	Phe	Ile	Ala	Gly	Ile	Asp
		275					280					285			
Leu	Lys	Gln	Gln	Lys	Arg	Glu	Gln	Ser	Arg	Phe	Tyr	Gly	Asp	Leu	Met
	290					295					300				
Glu	Lys	Arg	Arg	Thr	Leu	Glu	Glu	Lys	Glu	Gln	Glu	Glu	Ala	Arg	Leu
305					310					315					320
Arg	Lys	Leu	Arg	Lys	Lys	Glu	Ala	Lys	Gln	Arg	Trp	Asp	Asp	Arg	His
				325					330					335	
Trp	Ser	Gln	Lys	Lys	Leu	Asp	Glu	Met	Thr	Asp	Arg	Asp	Trp	Arg	Ile
			340					345					350		
Phe	Arg	Glu	Asp	Tyr	Ser	Ile	Thr	Thr	Lys	Gly	Gly	Lys	Ile	Pro	Asn
		355					360					365			
Pro	Ile	Arg	Ser	Trp	Lys	Asp	Ser	Ser	Leu	Pro	Pro	His	Ile	Leu	Glu
	370					375					380				
Val	Ile	Asp	Lys	Cys	Gly	Tyr	Lys	Glu	Pro	Thr	Pro	Ile	Gln	Arg	Gln
385					390					395					400
Ala	Ile	Pro	Ile	Gly	Leu	Gln	Asn	Arg	Asp	Ile	Ile	Gly	Val	Ala	Glu
				405					410					415	
Thr	Gly	Ser	Gly	Lys	Thr	Ala	Ala	Phe	Leu	Ile	Pro	Leu	Leu	Val	Trp
			420					425					430		
Ile	Thr	Thr	Leu	Pro	Lys	Ile	Asp	Arg	Ile	Glu	Glu	Ser	Asp	Gln	Gly
		435					440					445			
Pro	Tyr	Ala	Ile	Ile	Leu	Ala	Pro	Thr	Arg	Glu	Leu	Ala	Gln	Gln	Ile
	450					455					460				

Glu	Glu	Glu	Thr	Ile	Lys	Phe	Gly	Lys	Pro	Leu	Gly	Ile	Arg	Thr	Val
465					470					475					480
Ala	Val	Ile	Gly	Gly	Ile	Ser	Arg	Glu	Asp	Gln	Gly	Phe	Arg	Leu	Arg
				485					490					495	
Met	Gly	Cys	Glu	Ile	Val	Ile	Ala	Thr	Pro	Gly	Arg	Leu	Ile	Asp	Val
			500					505					510		
Leu	Glu	Asn	Arg	Tyr	Leu	Val	Leu	Ser	Arg	Cys	Thr	Tyr	Val	Val	Leu
		515					520					525			
Asp	Glu	Ala	Asp	Arg	Met	Ile	Asp	Met	Gly	Phe	Glu	Pro	Asp	Val	Gln
	530					535					540				
Lys	Ile	Leu	Glu	His	Met	Pro	Val	Ser	Asn	Gln	Lys	Pro	Asp	Thr	Asp
545					550					555					560
Glu	Ala	Glu	Asp	Pro	Glu	Lys	Met	Leu	Ala	Asn	Phe	Glu	Ser	Gly	Lys
				565					570					575	
His	Lys	Tyr	Arg	Gln	Thr	Val	Met	Phe	Thr	Ala	Thr	Met	Pro	Pro	Ala
			580					585					590		
Val	Glu	Arg	Leu	Ala	Arg	Ser	Tyr	Leu	Arg	Arg	Pro	Ala	Val	Val	Tyr
		595					600					605			
Ile	Gly	Ser	Ala	Gly	Lys	Pro	His	Glu	Arg	Val	Glu	Gln	Lys	Val	Phe
	610					615					620				
Leu	Met	Ser	Glu	Ser	Glu	Lys	Arg	Lys	Lys	Leu	Leu	Ala	Ile	Leu	Glu
625					630					635					640
Gln	Gly	Phe	Asp	Pro	Pro	Ile	Ile	Ile	Phe	Val	Asn	Gln	Lys	Lys	Gly
				645					650					655	
Cys	Asp	Val	Leu	Ala	Lys	Ser	Leu	Glu	Lys	Met	Gly	Tyr	Asn	Ala	Cys
			660					665					670		
Thr	Leu	His	Gly	Gly	Lys	Gly	Gln	Glu	Gln	Arg	Glu	Phe	Ala	Leu	Sei
		675					680					685			
Asn	Leu	Lvs	Ala	Glv	Ala	Lvs	Asp	Ile	Leu	Val	Ala	Thr	Asp	Val	Ala

690 695 700

Gly Arg Gly Ile Asp Ile Gln Asp Val Ser Met Val Val Asn Tyr Asp

705 710 715 720

Met Ala Lys Asn Ile Glu Asp Tyr Ile His Arg Ile Gly Arg Thr Gly

725 730 735

765

Arg Ala Gly Lys Ser Gly Val Ala Ile Thr Phe Leu Thr Lys Glu Asp

740 745 750

Ser Ala Val Phe Tyr Glu Leu Lys Gln Ala Ile Leu Glu Ser Pro Val

760

Ser Ser Cys Pro Pro Glu Leu Ala Asn His Pro Asp Ala Gln His Lys

770 775 780

Pro Gly Thr Ile Leu Thr Lys Lys Arg Arg Glu Glu Thr Ile Phe Ala

785 790 795 800

<210> 3629

<211> 287

<212> PRT

<213> Homo sapiens

755

<400> 3629

Met Leu Val Pro Val Lys Tyr Thr Arg Gln Thr Thr Asn Glu Leu Pro

1 5 10 15

Val Gly Trp Trp Trp Ser Leu Pro Cys His Ala Thr Leu Gln Asn

20 25 30

Trp Trp Pro Pro His Pro Cys Ile Ser Pro Gln Arg Ala His Cys Arg

35 40 45

Thr Leu Pro Ser Thr Gln Ala Thr Gly Leu Arg Ser Pro Pro Pro Ala

50 55 60

Gly	Lys	Pro	Pro	Gln	Arg	Ser	Pro	Arg	Leu	Glu	Ser	Ser	Arg	Val	Lys
65	;				70					75					80
Thi	Ser	Val	Leu	Ser	Ala	Arg	His	Lys	Ala	Lys	His	Leu	Arg	Ala	Val
				85					90					95	
Ala	Thr	Leu	Pro	Lys	Ala	Glu	Glu	Gly	Phe	Thr	Cys	Arg	His	Ala	Pro
			100					105					110		
His	Ala	Val	Arg	Ser	Thr	Ser	Thr	Phe	Val	His	Arg	Thr	Gly	Asn	Gly
		115					120					125			
Glu	ı Leu	Ile	Gly	Trp	Ala	Ala	Thr	Thr	His	Gly	Leu	His	Ser	Pro	Pro
	130					135					140				
Ala	Ala	Asp	Gly	Arg	Pro	Gln	Leu	Arg	Gly	Ala	Arg	Thr	Arg	Tyr	Pro
145	;				150					155					160
Gly	Ile	Pro	Val	Ala	Leu	Ala	Ile	Ala	His	Arg	His	Ile	Ala	Gly	Met
				165					170					175	
Ser	Pro	Cys	Val	Arg	Arg	Glu	Ala	Leu	Leu	Phe	Pro	Ser	Cys	Glu	His
			180					185					190		
Glr	ı Ala	Gly	Pro	Arg	Ala	Leu	Cys	Val	Val	Ser	Ile	Gly	Arg	Cys	Arg
		195					200					205			
Thi	Lys	Val	Ala	Pro	Ser	Leu	Arg	Arg	Thr	Thr	Thr	His	Val	Thr	Leu
	210					215					220				
Sei	Cys	Ala	Thr	Leu	Gln	Gln	Pro	Leu	Gln	Thr	Cys	His	Asp	Ala	Asp
225	<u>;</u>				230					235					240
Leu	ı Pro	Leu	Pro	Arg	Leu	Pro	Val	Ala	Ser	Pro	Arg	Asp	Pro	His	Leu
				245					250					255	
Cys	His	Pro	Gln	Arg	His	Arg	Arg	Cys	Arg	Pro	Gly	Leu	Asp	Arg	Arg
			260					265					270		
Pro	His	Lys	Leu	Gly	Phe	Pro	Ala	Val	Pro	Val	Arg	Ala	Glu	Leu	
		275					280					285			

<210> 3630

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3630

Met Ala Ile Gly Met Arg Leu Arg Val Phe Ser Leu Lys Leu Asp Ala 1 5 10 15

Leu Phe His Phe Leu Pro Ser Lys Ile Asp Leu Met Pro His Asp Leu 20 25 30

Ile Thr Gln Leu Leu Arg Val Leu Ala Ile Glu Thr Lys Gln Glu Lys
35 40 45

Ala Met Ala His Ala Asp Pro Thr Glu Leu Ala Leu Ser Gly Leu Glu
50 55 60

Ala Phe Ser Phe Asp Tyr Ile Val Lys Trp Pro Leu Ser Leu Ile Ile
65 70 75 80

Asn Arg Cys Gly Ser Ala Ala Arg Ala Pro Ala Arg Ser Ser Leu Arg 85 90 95

Phe Gly Arg Ser Glu Asn Cys Ala Thr Arg Trp Pro Pro Arg Pro Thr
100 105 110

Glu Asp Pro Arg Arg Leu Ser Pro Ala Phe Ser Val Arg Glu Ile His
115 120 125

Gly Leu Ser Gly Gly His Gly Ala Asp Cys Gly Val Gln Thr Pro Cys
130 135 140

Pro Arg Arg Arg Ser Arg Arg Pro Thr

<210> 3631

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3631

Met Tyr Cys Gly Ser Pro Trp Pro Leu Gly Gln Ser Ser Arg Leu Gln

1 5 10 15

Asp Cys Leu Gln Arg Pro Cys Leu Pro Ala Ala Arg Glu Ser Ser Ser

20 25 30

Ala Ile His Leu Ser Leu Ile Cys His Thr Pro Gln Pro Trp Pro Ser

35 40 45

Ala Leu Ala Val Ser Ser His Thr Ser Gln Gly Pro Gly Ser Val Glu

50 55 60

Lys Pro Gln Lys Ala His Ala Ala Pro Cys Arg Pro Ala Thr Ala Ala

65 70 75 80

Ser Gly Phe Pro Trp Glu Arg His Pro Gly Arg Ala Gly Gln Gly Ser

85 90 95

Arg Ser Pro Leu Gly Ser Cys Gln Arg Val Asn Arg Ser Lys Thr Cys

100 105 110

Leu Trp Leu Ile Phe Leu Leu Ile Glu Val Ile Gln Ser Gln Met Lys

115 120 125

Tyr His Leu Asn Phe Pro

130

<210> 3632

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3632

Met Phe Leu Leu Phe Ile Tyr Ala Ile Asn Thr Ile Leu Cys Asn Leu

1 5 10 15

Phe Phe Ile Phe Tyr Phe Phe Ala Leu Asp Ser Leu Cys Leu Phe Phe

20 25 30

Glu Ile Asp Phe Arg Ser Val Thr Gln Ala Arg Val Gln Leu Cys Asp

35 40 45

Leu Asp Ser Leu Gln Pro Pro Pro Pro Gly Phe Met Gln Phe Ser Cys

50 55 60

Phe Gly Leu Leu Ser Ser Trp Asp Tyr Arg Pro Ile Thr Ile Pro Phe

65 70 75 80

Ser Gly Trp Leu Gly Arg Gly His Pro Ser Leu Ser Leu Ala Ser Arg

85 90 95

Gly Arg Thr Gly Leu Leu Val Ser Pro Gln Ser Cys

100 105

<210> 3633

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3633

Met Gln Trp His Asn Leu Gly Ser Leu Gln Pro Leu Pro Pro Arg Phe

1 5 10 15

Lys Arg Phe Ser Cys Leu Ser Leu Pro Ile Ser Trp Asp Tyr Arg His

20 25 30

Ala Pro Pro Arg Leu Thr Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu Gln Val Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser Pro Tyr Gln Arg Arg Leu Ala Ser Asp Ala Leu Leu Ser Ile Phe Val Lys Leu Glu Ile Val Gly Gln Cys <210> 3634 <211> 254 <212> PRT <213> Homo sapiens <400> 3634 Met Asn Arg Ser Ser Gly Thr Pro Gly Arg Pro His Pro Gly Ala Pro

Arg Val Ala Ala Ser Leu Phe Leu Gly Thr Phe Phe Ile Ser Ser Gly Leu IIe Leu Ser Val Ala Gly Phe Phe Tyr Leu Lys Arg Ser Ser Lys Leu Pro Arg Ala Cys Tyr Arg Arg Asn Lys Ala Pro Ala Leu Gln Pro Gly Glu Ala Ala Met Ile Pro Pro Pro Gln Ser Ser Gly Asn Ser Ser Cys Arg Ile Pro Leu Trp Gly Phe Pro Ser Leu Gly Gln Ser Gln

Gly Ala Leu Trp Val Cys Pro Gln Thr Gly Leu Pro Gly Ser Gly Ser Arg Pro Pro Leu Pro Gly Ser Pro Gly Asp Pro Pro Thr Arg Gln Gly Gln Gly Arg Ile Trp Leu Val Pro Pro Ala Leu Asp Leu Ser Trp Ile Trp Pro Ala Pro Pro Ala Arg Pro Pro Leu Ile Pro Val Thr Ser Met Leu Phe Pro Val Pro Glu Thr Trp Gly Leu Gln Glu Arg Arg Thr His His Asp Arg Ala Asp Pro Gln Tyr Leu Leu Leu Glu Val Gln Leu His Pro Arg Thr Asp Ala Ala Gly Leu Arg Gln Ala Leu Leu Ser Ser His Arg Phe Ser Gly Ala Gly Ser Gly Gly Pro Lys Ser Gln Pro Val Arg Lys Pro Arg Tyr Val Arg Arg Glu Arg Pro Leu Asp Arg Ala Thr

Asp Pro Ala Ala Phe Pro Gly Glu Ala Arg Ile Ser Asn Val 245 250

<210> 3635

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3635

Met Thr Ser Asp Phe Asp Leu Leu Gly Ser Asp Asp Pro Pro Ala Ser 1 5 10 15 Ala Ser Arg Val Ala Gly Thr Val Gly Thr Pro Pro Cys Thr Ala Asn 30 20 25 Phe Phe Cys Ile Phe Leu Arg Arg Trp Arg Phe Ala Met Leu Pro Arg 40 45 35 Leu Val Ser Lys Ser Trp Ala Gln Ala Val Cys Pro Pro Gln Pro Pro 60 50 55 Lys Val Leu Glu Leu Gln Ala Arg Ala Thr Ala Pro Ser His Asn Leu 70 75 80 65 Arg Phe Leu Trp Gln Thr Glu Met Phe Lys Asn Thr Lys Phe Cys Ser 90 95 85 Gly Glu Thr Leu Cys Tyr Tyr Gln Ile Ser His Pro His Lys Val Phe 100 105 110 Leu Phe Gly Phe Val Ser 115 <210> 3636

<211> 501

<212> PRT

<213> Homo sapiens

<400> 3636

Met Glu Thr Ile Leu Glu Gln Gln Arg Arg Tyr His Glu Glu Lys Glu

1 5 10 15

Arg Leu Met Asp Val Met Ala Lys Glu Met Leu Thr Lys Lys Ser Thr
20 25 30

Leu Arg Asp Gln Ile Asn Ser Asp His Arg Thr Arg Ala Met Gln Asp

		35					40					45			
Arg	Tyr	Met	Glu	Val	Ser	Gly	Asn	Leu	Arg	Asp	Leu	Tyr	Asp	Asp	Lys
	50					55					60				
Asp	Gly	Leu	Arg	Lys	Glu	Glu	Leu	Asn	Ala	Ile	Ser	Gly	Pro	Asn	Glu
65					70					75					80
Phe	Ala	Glu	Phe	Tyr	Asn	Arg	Leu	Lys	Gln	Ile	Lys	Glu	Phe	His	Arg
				85					90					95	
Lys	His	Pro	Asn	Glu	Ile	Cys	Val	Pro	Met	Ser	Val	Glu	Phe	Glu	Glu
			100					105					110		
Leu	Leu	Lys	Ala	Arg	Glu	Asn	Pro	Ser	Glu	Glu	Ala	Gln	Asn	Leu	Val
		115					120					125			
Glu	Phe	Thr	Asp	Glu	Glu	Gly	Tyr	Gly	Arg	Tyr	Leu	Asp	Leu	His	Asp
	130					135					140				
Cys	Tyr	Leu	Lys	Tyr	Ile	Asn	Leu	Lys	Ala	Ser	Glu	Lys	Leu	Asp	Tyr
145					150					155					160
Ile	Thr	Tyr	Leu	Ser	Ile	Phe	Asp	Gln	Leu	Phe	Asp	Ile	Pro	Lys	Glu
				165					170					175	
Arg	Lys	Asn	Ala	Glu	Tyr	Lys	Arg	Tyr	Leu	Glu	Met	Leu	Leu	Glu	Tyr
			180					185					190		
Leu	Gln	Asp	Tyr	Thr	Asp	Arg	Val	Lys	Pro	Leu	Gln	Asp	Gln	Asn	Glu
		195					200					205			
Leu	Phe	Gly	Lys	Ile	Gln	Ala	Glu	Phe	Glu	Lys	Lys	Trp	Glu	Asn	Gly
	210					215					220				
Thr	Phe	Pro	Gly	Trp	Pro	Lys	Glu	Thr	Ser	Ser	Ala	Leu	Thr	His	Ala
225					230					235					240
Gly	Ala	His	Leu	Asp	Leu	Ser	Ala	Phe	Ser	Ser	Trp	Glu	Glu	Leu	Ala
				245					250					255	
Ser	Leu	Gly	Leu	Asp	Arg	Leu	Lys	Ser	Ala	Leu	Leu	Ala	Leu	Gly	Leu
			260					265					270		

Lys	Cys	Gly	Gly	Thr	Leu	Glu	Glu	Arg	Ala	Gln	Arg	Leu	Phe	Ser	Thr
		275					280					285			
Lys	Gly	Lys	Ser	Leu	Glu	Ser	Leu	Asp	Thr	Ser	Leu	Phe	Ala	Lys	Asn
	290					295					300				
Pro	Lys	Ser	Lys	Gly	Thr	Lys	Arg	Asp	Thr	Glu	Arg	Asn	Lys	Asp	Ile
305					310					315					320
Ala	Phe	Leu	Glu	Ala	Gln	Ile	Tyr	Glu	Tyr	Val	Glu	Ile	Leu	Gly	Glu
				325					330					335	
Gln	Arg	His	Leu	Thr	His	Glu	Asn	Val	Gln	Arg	Lys	Gln	Ala	Arg	Thr
			340					345					350		
Gly	Glu	Gly	Arg	Glu	Glu	Glu	Glu	Glu	Glu	Gln	Ile	Ser	Glu	Ser	Glu
		355					360					365			
Ser	Glu	Asp	Glu	Glu	Asn	Glu	Ile	Ile	Tyr	Asn	Pro	Lys	Asn	Leu	Pro
	370					375					380				
Leu	Gly	Trp	Asp	Gly	Lys	Pro	Ile	Pro	Tyr	Trp	Leu	Tyr	Lys	Leu	His
385					390					395					400
Gly	Leu	Asn	Ile	Asn	Tyr	Asn	Cys	Glu	Ile	Cys	Gly	Asn	Tyr	Thr	Tyr
				405					410					415	
Arg	Gly	Pro	Lys	Ala	Phe	Gln	Arg	His	Phe	Ala	Glu	Trp	Arg	His	Ala
			420					425					430		
His	Gly	Met	Arg	Cys	Leu	Gly	Ile	Pro	Asn	Thr	Ala	His	Phe	Ala	Asn
		435					440					445			
Val	Thr	Gln	Ile	Glu	Asp	Ala	Val	Ser	Leu	Trp	Ala	Lys	Leu	Lys	Leu
	450					455					460				
Gln	Lys	Ala	Ser	Glu	Arg	Trp	Gln	Pro	Asp	Thr	Glu	Glu	Glu	Tyr	Glu
465					470					475					480
Asp	Ser	Ser	Gly	Asn	Val	Val	Asn	Lys	Lys	Thr	Tyr	Glu	Asp	Leu	Lys
				485					490					495	
Arg	Gln	Glv	Leu	Leu											

<210> 3637 <211> 212 <212> PRT <213> Homo sapiens <400> 3637 Met Ser Lys Met Phe Ser Gly Gly Ala Ser Ser Ala Gly Arg Arg Glu Gly Asn Arg Cys Gly Gln Ala Glu Leu Ser Arg Gly Ala Gly Gly Arg Leu Arg Ala Pro Asp Gly Ile Ser Thr Val Gly Arg Val Pro Leu Pro . 40 Trp Ser Cys Pro Ala Gly Trp Trp Pro Pro Glu Ala Thr Val Arg Leu Trp Pro Leu Thr Leu Pro Ala Gly Leu Asn Ser Trp Pro Arg Val Arg Phe Gly Gly Ala Pro Phe Cys Leu Pro Gln Asn Gly Leu Leu Tyr Phe His Pro Gln Ala Ala Gly Pro Arg Leu Ala Ser Arg Trp Arg Gly Arg Thr Val Ala Thr Val Ala Pro Ala Arg Tyr Leu Ser Trp Gly Trp Ile Pro Gly Glu Ala Leu Thr His Arg Val Lys Ala Ser Trp Gln Pro Pro

Gln Gly Arg Ser Leu Gly Ser Pro Arg Phe Ala Asp Glu Glu Thr Val

Thr Cys Ser Ser His Thr Ala Arg Lys Arg Trp Ser Tyr Gly Trp Val Gln Val Cys Leu Asp Pro Val Leu Cys Gln Cys Leu His Pro Pro Ser Arg Pro Arg Arg Leu Ala Ser Phe His Lys Leu Glu Gly Pro Gln Asp Ser Leu Leu Ser <210> 3638 <211> 125 <212> PRT <213> Homo sapiens

<400> 3638

Met Pro Phe Pro Ala Ser Pro Gly Gln Ala Arg Ser Trp Cys Cys Thr His Leu Leu His Ala Pro Leu Gly Asp Gly Thr Leu Gln His Cys Leu Leu Leu Phe Pro Gly Leu Asn Val Ala Lys Cys His Val Val Gln Glu Ser Arg Gln Phe Ala Ile Gly Val Phe Gln Ser Leu Ser Leu Gly Leu Arg Leu Lys Gln Val Cys His Phe Cys Ser Gln Leu Val Gln Gly Pro Pro Arg Cys Ser Gln Gln Cys Ser Leu Pro Cys Ala Trp Leu Leu Ala

Cys Ser Pro Arg Leu His Leu Thr Leu Trp Ser Thr Leu Val Phe Ala

 Arg Asp Ser Leu Ser Leu Pro
 Leu Glu Ile Leu Thr

 115
 120

<210> 3639

<211> 137

<212> PRT

<213> Homo sapiens

<400> 3639

Met Cys Ala Thr Ser Gln Pro Leu Val Pro Asn Ser Pro Gln Ala Leu

1 5 10 15

Leu Ser Leu Cys Leu Cys Leu Tyr Arg Phe Leu Cys Pro Ala Tyr Phe
20 25 30

Pro Phe Leu Thr Ser Pro Ala Ile His Leu Phe Ile Ser Ile His Leu
35 40 45

Phe Ile Ser Ile His Leu Phe Ile Lys Tyr Leu Trp Gly Ala Ser Met
50 55 60

Met Cys Gln Ser Tyr Trp Pro Val Gly Leu IIe Ser Asp Thr Ala Leu 65 70 75 80

Val Thr Val Leu Val Gly Arg Ala Leu Cys Ile Pro His Arg Pro Ala 85 90 95

Gly Pro Cys Phe Ala Val Ala Thr Tyr Asn Ala Gln Gly Pro Leu Ser 100 105 110

Val Thr Pro Val Leu Leu Phe Ser Thr Leu Val Leu Val His His Phe 115 120 125

Pro Trp Arg Ser Tyr Val Asn Arg Asp 130 135 <210> 3640 <211> 224 <212> PRT <213> Homo sapiens <400> 3640 Met Glu Asn Gln Thr Lys Pro Pro Asp Pro Arg Pro Asp Ala Pro Pro Glu Tyr Asn Ser His Phe Leu Pro Gly Pro Pro Gly Thr Ala Val Pro Pro Pro Thr Gly Tyr Pro Gly Gly Leu Pro Met Gly Tyr Tyr Ser Pro Gln Gln Pro Ser Thr Phe Pro Leu Tyr Gln Pro Val Gly Gly Ile His Pro Val Arg Tyr Gln Pro Gly Lys Tyr Pro Met Pro Asn Gln Ser Val Pro Ile Thr Trp Met Pro Gly Pro Thr Pro Met Ala Asn Cys Pro Pro Gly Leu Glu Tyr Leu Val Gln Leu Glu Val Gln Cys Pro Pro Gly Val Thr Ile Gly Phe Val Ala Glu His Trp Asn Leu Cys Arg Ala Val Tyr Ser Ile Gln Asn Glu Lys Lys Glu Asn Val Met Arg Val Arg Gly Pro

Cys Ser Thr Tyr Gly Cys Gly Ser Asp Ser Val Phe Glu Val Lys Ser

Leu Asp Gly Ile Ser Asn Ile Gly Ser Ile Ile Arg Lys Trp Asn Gly

Leu Leu Ser Ala Met Ala Asp Ala Asp His Phe Asp Ile His Phe Pro Leu Asp Leu Asp Val Lys Met Lys Ala Met Ile Phe Gly Ala Cys Phe Leu Ile Asp Phe Met Tyr Phe Glu Arg Ser Pro Pro Gln Arg Ser Arg <210> 3641 <211> 116 <212> PRT <213> Homo sapiens <400> 3641 Met Tyr Lys Tyr Ile Gln Thr His Asp Thr Glu Leu Asp His Gln Gln Gly Ile Cys Lys Lys Arg Arg Glu Asn Ile Thr Gly Leu Ser Pro Glu Asn Val His Ala His Leu His Met Arg Asn Arg Gly Phe Arg Trp Leu

Asn Asp Val Leu Trp Ile Ile Ser Ala Ser Ser Arg Pro Gln Leu Leu

Pro Phe Pro Val Lys Ile Phe Leu Trp Ile Leu Asp Thr Lys Gly Glu

Lys Ile Ser Ile Leu Lys Phe Leu Asn Ser Ala Leu Gln Lys Val Leu

Gly Ile Cys Asn Val Leu Gln Val Gly Met Asp Phe Leu Leu Ala Ala

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Phe Gln Pro Leu

115

<210> 3642

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3642

Met Cys Leu Ser Ser Gly His Ile Arg Asn Glu Pro Arg Pro Gln Ser

1 5 10 15

Trp Pro Pro Pro Gln Gly Trp Val Leu Arg Arg Pro Pro Gln Pro Leu

20 25 30

Ser Leu Asp Leu Pro Ala Glu Gln Thr Arg Thr Ser His Ser Pro Ala

35 40 45

Thr Ala Arg Ser Cys Ser Trp Ser Ser Thr Pro Gly Trp Arg Glu Arg

50 55 60

Arg His Pro Gly Gln Pro Ala Ser Thr Gln Ala Leu Thr Val Glu Ala

65 70 75 80

His Val Phe Leu Gly Ser Ile Leu Lys Ala Val Leu Ser Thr Thr Ala

85 90 95

Leu Thr Arg Ile Asp Leu Ser Glu Pro Ala Cys Gln Tyr Arg Pro Ala

100 105 110

Gln Asp Trp Pro Gln Gly His Ile Gly Glu Gly Gly Asp Gln Ala Leu

115 120 125

Ala Ala Ala His Val Gly Lys Ser Met Ala Arg Gln Glu Val Gly Pro

130 135 140

Val Ser Leu Ala Thr Ala Thr Val Gly Ala Gly Pro Gly Ala Pro Gln

145 150 155 160 Pro

<210> 3643

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3643

Met Tyr Arg Asn Gly Ile Ser Thr Thr Pro Gln Gly Asp Met Asn Ser

1 5 10 15

Phe Ser Gln Ala Ala His Gly His Arg Asn Val Phe Arg Lys Leu 20 25 30

Leu Ala Gln Pro Glu Lys Glu Lys Ser Asp Ile Leu Ser Leu Glu Glu
35 40 45

Ile Leu Ala Glu Gly Thr Asp Leu Ala Glu Thr Ala Pro Pro Pro Leu
50 55 60

Cys Ala Ser Arg Asn Ser Lys Ala Lys Leu Arg Ala Leu Arg Glu Ala
65 70 75 80

Met Tyr His Ser Ala Glu His Gly Tyr Val Asp Val Thr Ile Asp Ile 85 90 95

Arg Ser Ile Gly Val Pro Trp Thr Leu His Thr Trp Leu Glu Ser Leu
100 105 110

Arg Ile Ala Phe Gln Gln His Arg Arg Pro Leu Ile Gln Cys Leu Leu 115 120 125

Lys Glu Phe Lys Thr Ile Gln Glu Glu Glu Tyr Thr Glu Glu Leu Val 130 135 140

Thr	Gln	Gly	Leu	Pro	Leu	Met	Phe	Glu	Ile	Leu	Lys	Ala	Ser	Lys	Asn
145					150					155					160
Glu	Val	Ile	Ser	Gln	Gln	Leu	Cys	Val	Ile	Phe	Thr	His	Cys	Tyr	Gly
				165					170					175	
Pro	Tyr	Pro	Ile	Pro	Lys	Leu	Thr	Glu	Ile	Lys	Arg	Lys	Gln	Thr	Ser
			180					185					190		
Arg	Leu	Asp	Pro	His	Phe	Leu	Asn	Asn	Lys	Glu	Met	Ser	Asp	Val	Thr
		195					200					205			
Phe	Leu	Val	Glu	Gly	Arg	Pro	Phe	Tyr	Ala	His	Lys	Val	Leu	Leu	Phe
	210					215					220				
Thr	Ala	Ser	Pro	Arg	Phe	Lys	Ala	Leu	Leu	Ser	Ser	Lys	Pro	Thr	Asn
225					230					235					240
Asp	Gly	Thr	Cys	Ile	Glu	Ile	Gly	Tyr	Val	Lys	Tyr	Ser	Ile	Phe	Gln
				245					250					255	
Leu	Val	Met	Gln	Tyr	Leu	Tyr	Tyr	Gly	Gly	Pro	Glu	Ser	Leu	Leu	Ile
			260					265					270		
Lys	Asn	Asn	Glu	Ile	Met	Glu	Leu	Leu	Ser	Ala	Ala	Lys	Phe	Phe	Gln
		275					280			•		285			
Leu	Glu	Ala	Leu	Gln	Arg	His	Cys	Glu	Ile	Ile	Cys	Ala	Lys	Ser	Ile
	290					295					300				
Asn	Thr	Asp	Asn	Cys	Val	Asp	Ile	Tyr	Asn	His	Ala	Lys	Phe	Leu	Gly
305					310					315					320
Val	Thr	Glu	Leu	Ser	Ala	Tyr	Cys	Glu	Gly	Tyr	Phe	Leu	Lys	Asn	Met
				325					330					335	
Met	Val	Leu	Ile	Glu	Asn	Glu	Ala	Phe	Lys	Gln	Leu	Leu	Tyr	Asp	Lys
			340					345					350		
Asn	Gly	Glu	Gly	Thr	Gly	Gln	Asp	Val	Leu	Gln	Asp	Leu	Gln	Arg	Thr
		355					360					365			
Leu	Ala	Ile	Arg	Ile	Gln	Ser	Ile	His	Leu	Ser	Ser	Ser	Lys	Gly	Ser

370 375 380 Val Val

385

<210> 3644

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3644

Met Gly Pro Gln Phe Leu Ser Phe Phe Leu Phe Leu Pro Ser Phe Leu

1 5 10 15

Phe Ser Phe Leu Phe Phe Leu Ser Phe Leu Phe Phe Ser Ser Phe Phe 20 25 30

Ser Phe Phe Tyr Phe Leu Ser Ser Phe Pro Leu Phe Ser Phe Phe Leu 35 40 45

Ser Phe Ser Leu Ser Phe Leu Phe Leu Thr Glu Ser Tyr Phe Val Ala 50 55 60

Gln Ala Gly Val Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro Pro 65 70 75 80

Ser Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser Ser Thr Trp Gly

85 90 95

Tyr Arg Cys Met Ala Gln Arg Pro Ala Asn Phe Leu Cys Phe Ser Gly
100 105 110

Asp Gly Val Ser Pro Cys Trp Pro Gly
115 120

<210> 3645

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3645

Met Ser Pro Pro Ser Gly Pro Gly Pro Pro His Ser Ser Ala Trp His

1 5 10 15

Trp Pro Pro Pro Pro Pro Ala Pro Pro Cys Met Pro Ala Ala Pro Trp

20 25 30

Gln Thr Pro Pro Trp Ala Leu Gly Trp Thr Arg Arg Asp Ala Gly Ser

35 40 45

Glu Ala Pro Glu Gln Thr Gln Pro Met Cys Gln Pro Ser Asp Ser Gln

50 55 60

Ala Gly Leu Ser Ile Ile Lys Gln Cys Thr Val Thr His Arg Ala Pro

65 70 75 80

Pro Gly Thr Thr Arg Ala Lys Gly Leu Arg Leu His Val Gly Ser Thr

85 90 95

Ile Ile Met Ser Leu Gly Asn Arg Met Arg Pro Leu Pro Cys Leu Gly

100 105 110

Leu Pro Gly Pro Trp Gly Pro His Leu Ser Pro Ala Leu Pro Thr Thr

115 120 125

Gln Gly His Arg Gln

130

<210> 3646

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3646

Met Pro Cys Ser Cys Ser His Lys Ser Arg Arg Ala Trp Gly His Thr

1 5 10 15

Gly His Gly Ser Val Val Ser Ile Ser Val Ser Gln Leu Leu Ala Gln
20 25 30

Gln Pro Ala Gly Arg Pro Cys Met Arg Pro Asp Thr Gly Arg Lys
35 40 45

Leu His Ser Gln Phe Cys Pro Val Gln Lys Arg Pro Gly Arg Gly Gln
50 55 60

Ile Ala Pro Ala Val Pro Pro Tyr Pro Gln Gly Thr Ala Leu Ser Ser
65 70 75 80

Arg Leu Leu Asn Gly Pro Met Lys Asp Ala Val Thr Phe Ala Thr Phe
85 90 95

Leu Lys Gly Ser Gly Gln Gly Asp Thr Ser Gly Leu Cys Phe Gln Gly
100 105 110

Arg Leu Met

115

<210> 3647

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3647

1

Met Cys Leu Leu Ser Cys Pro Cys His Pro Ser Ala His Gly Gln

5 10

Ser	Met	Trp	Ile	Glu	Arg	Thr	Ser	Phe	Val	Thr	Ala	Tyr	Lys	Leu	Pro
			20					25					30		
Gly	Ile	Leu	Arg	Trp	Phe	Glu	Val	Val	His	Met	Ser	Gln	Thr	Thr	Ile
		35					40					45			
Ser	Pro	Leu	Glu	Asn	Ala	Ile	Glu	Thr	Met	Ser	Thr	Ala	Asn	Glu	Lys
	50					55					60				
Ile	Leu	Met	Met	Ile	Asn	Gln	Tyr	Gln	Ser	Asp	Glu	Thr	Leu	Pro	Ile
65					70					75					80
Asn	Pro	Leu	Ser	Met	Leu	Leu	Asn	Gly	Ile	Val	Asp	Pro	Ala	Val	Met
				85					90					95	
Gly	Gly	Phe	Ala	Lys	Tyr	Glu	Lys	Ala	Phe	Phe	Thr	Glu	Glu	Tyr	Val
			100					105					110		
Arg	Asp	His	Pro	Glu	Asp	Gln	Asp	Lys	Leu	Thr	His	Leu	Lys	Asp	Leu
		115					120					125			
Ile	Ala	Trp	Gln	Ile	Pro	Phe	Leu	Gly	Ala	Gly	Ile	Lys	Ile	His	Glu
	130					135					140				
Lys	Arg	Val	Ser	Asp	Asn	Leu	Arg	Pro	Phe	His	Asp	Arg	Met	Glu	Glu
145					150					155					160
Cys	Phe	Lys	Asn	Leu	Lys	Met	Lys	Val	Glu	Lys	Glu	Tyr	Gly	Val	Arg
				165					170					175	
Glu	Met	Pro	Asp	Phe	Asp	Asp	Arg	Arg	Val	Gly	Arg	Pro	Arg	Ser	Met
			180					185					190		
Leu	Arg	Ser	Tyr	Arg	Gln	Met	Ser	Ile	Ile	Ser	Leu	Ala	Ser	Met	Asn
		195					200					205			
Ser	Asp	Cys	Ser	Thr	Pro	Ser	Lys	Pro	Thr	Ser	Glu	Ser	Phe	Asp	Leu
	210					215					220				
Glu	Leu	Ala	Ser	Pro	Lys	Thr	Pro	Arg	Val	Glu	Gln	Glu	Glu	Pro	Ile
225					230					235					240
Ser	Pro	Glv	Ser	Thr	Leu	Pro	Glu	Val	Lvs	Leu	Arg	Arg	Ser	Lvs	Lvs

Arg Thr Lys Arg Ser Ser Val Val Phe Ala Asp Glu Lys Ala Ala Ala Glu Ser Asp Leu Lys Arg Leu Ser Arg Lys His Glu Phe Met Ser Asp Thr Asn Leu Ser Glu His Ala Ala Ile Pro Leu Lys Ala Ser Val Leu Ser Gln Met Ser Phe Ala Ser Gln Ser Met Pro Thr Ile Pro Ala Leu Ala Leu Ser Val Ala Gly Ile Pro Gly Leu Asp Glu Ala Asn Thr Ser Pro Cys Leu Ser Gln Thr Phe Leu Gln Leu Ser Asp Gly Asp Lys Lys Thr Leu Thr Arg Lys Lys Val Asn Gln Phe Phe Lys Thr Met Leu Ala Ser Lys Ser Ala Glu Glu Gly Lys Gln Ile Pro Asp Ser Leu Ser Thr

Asp Leu

<210> 3648

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3648

Met Thr Gln Thr Pro Ser Ser Arg Ser Ser Thr Val Leu Thr Arg Ala
1 5 10 15

Pro Asp Ser Ser Pro Thr Ala Pro Phe Leu Gly Ser Pro Thr Trp Met 20 25 30 Ser Thr Gly Thr Ala Ser Ser Ala Val Ala Arg Met Leu Asp Val Leu 35 40 45 Pro Gln Thr Cys Tyr Ser His Leu Pro Ile Ser Val Asn Ser Thr Thr 50 55 60 Phe Thr Gln Val Lys Ser Leu Gly Glu Ser Leu Asp Ser Phe His Pro 70 75 80 65 Leu His Phe Gln Pro Thr Pro Lys Ser Cys Trp Leu Tyr Cys Ser Cys 85 90 95 Leu Asn Pro Pro Ala Leu Val Ser Ile Ala Pro Leu Asn Pro Asp His 100 105 110 His Gly Gln Pro Ser Tyr Pro Ser Ser Arg His Glu Ala Arg Ser Pro 120 115 125 Leu Glu Val Tyr Asp Ser His His Arg Gly Ala Gly Gln Leu Ser Trp 130 135 140 Gly Pro Ser Leu Cys Thr Cys Asp Arg Val Cys Pro Ser 145 150 155

<210> 3649

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3649

Met His Pro Ser Thr His Pro Ser Ile His Ala Cys Ile His Leu Ser

1 5 10 15

Ile His Ala Ser Ile His Pro Pro Met His Pro Ser Thr His Pro Cys

			20					25					30		
Thr	His	Pro	Phe	Ile	His	Pro	Cys	Ile	His	Pro	Ser	Thr	His	Val	Ser
		35					40					45			
Ile	His	Pro	Ser	Ile	His	Pro	Cys	Ile	His	Ala	Ser	Ile	His	Pro	Ser
	50					55					60				
Ile	His	Pro	Ser	Val	His	Pro	Ser	Met	Tyr	Pro	Phe	Ile	His	Ser	Tyr
65					70					75					80
Ile	His	Pro	Phe	Ile	His	Pro	Trp	Ile	His	Ala	Ser	Ser	Ile	Arg	Leu
				85					90					95	
Cys	Met	Asn	Ala	Cys	Met	His	Pro	Ser	Ile	His	Pro	Phe	Ile	Cys	Ser
			100					105					110		
Ser	Ile	His	Pro	Ser	Met	His	Pro	Pro	Ile	Tyr	Pro	Phe	Ile	Tyr	Pro
		115					120					125			
Ser	Met	His	Pro	Leu	Ile	His	Pro	Cys	Ile	His	Ala	Ser	Ile	Tyr	Pro
	130					135					140				
Ser	Met	His	Pro	Ser	Ile	His	Pro	Phe	Ile	His	Ala	Ser	Ile	His	Ala
145					150					155					160
Tyr	Ile	His	Pro	Cys	Ile	His	Gln	Ser	Ile	His	Ala	Cys	Ile	His	Pro
				165					170					175	
Ser	Ile	Tyr	Pro	Ser	Ile	His	Ala	Ser	Ile	His	Ser	Ser	Met	Tyr	Pro
			180					185					190		
Cys	Ile	His	Pro	Ser	Ile	His	Pro	Ser	Ile	Tyr	Ala	Arg	Met	His	Pro
		195					200					205			
Ser	Ile	His	Ser	Ser	Phe	His	Pro	Ser	Thr	Tyr	Pro	Cys	Ile	His	Pro
	210					215					220				
Phe	Ile	Tyr	Ala	Cys		His	Pro	Ser	Ile		Pro	Ser	Met	His	
225					230		_	_		235					240
Cys	Met	His	Pro		Ile	His	Pro	Tyr		His	Ala	Phe	He	His	Pro
				245					250					255	

Ser Val Asn Ala Ser Ile His Pro Cys Ile His Leu Ser Ile Cys Ala 260 270 265 Thr Ile His Pro Ser Met Tyr Pro Phe Ile His Leu Cys Asn His Pro 275 280 285 Ser Ile His Leu Phe Ile His Pro Cys Ile His Pro Ser Ile His Pro 295 300 290 Ser Ile His Val Ser Ile Tyr Pro Thr Met His Leu Ser Ile His Pro 320 310 315 305 Cys Ile His Pro Ser Ile Pro Pro Cys Ile His Pro Ser Ile His Glu 325 330 335 Ser Ile His His Pro Ser Ile His Pro Ser Ile Arg Pro Ser Met His 350 340 345 Ala Ser Ile His Pro Ser Ile His Leu Leu Asn Lys Ser Val Arg Ser 365 355 360

<210> 3650

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3650

Met Tyr Arg Ile Asn Thr Asp Ala Gln Glu Leu Glu Leu Cys Arg Arg

1 5 10 15

Leu Tyr Lys Leu His Phe Gln Leu Leu Leu Leu Phe Gln Ala Tyr Cys
20 25 30

Lys Leu Ile Asn Gln Val Asn Thr Ile Lys Asn Glu Ala Glu Val Ile
35 40 45

Asn Met Ser Glu Glu Leu Ala Gln Leu Glu Ser Ile Leu Lys Glu Ala

50 55 60

Glu Ser Ala Ser Glu Asn Glu Glu Ile Asp Ile Ser Lys Ala Ala Gln
65 70 75 80

Thr Thr Ile Glu Thr Ala Ile His Ser Leu Ile Glu Thr Leu Lys Asn
85 90 95

Lys Glu Phe Ile Ser Ala Ala Ala Gln Val Lys Ala Phe Arg Ser Leu 100 105 110

Trp Pro Ser Asp Ile Phe Gly Ser Cys Glu Asp Asp Pro Val Gln Thr
115 120 125

Leu Leu His Ile Tyr Phe His His Gln Thr Leu Gly Gln Thr Gly Ser
130 135 140

Phe Ala Val Ile Gly Ser Asn Leu Asp Met Ser Glu Ala Asn Tyr Lys 145 150 155 160

Leu Met Glu Leu Asn Leu Glu Ile Arg Glu Ser Leu Arg Met Val Gln 165 170 175

Ser Tyr Gln Leu Leu Ala Gln Ala Lys Pro Met Gly Asn Met Val Ser 180 185 190

Thr Gly Phe

195

<210> 3651

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3651

Met Leu Pro Phe Gln Val Gln Val Arg Ser Pro Asp Pro Thr Ile Trp

1 5 10 15

Trp Leu Glu Gly Gln Arg Asn Met Ser Thr Val Pro Thr Glu Ala Pro 20 25 30 Leu Pro Arg Arg Thr Trp Lys Val Ala Cys Gly Gly Ser Arg Ser Leu 40 35 45 Ala His Val Pro Gly Glu Thr Gly Arg Tyr Glu Ala Trp Arg Gly Gly 50 55 60 Gly Gly Gly His Ala Gly Gln Gly Trp Ala Gly Pro Trp Ser Glu Glu 70 75 80 65 Leu Ala Gln His Trp Gly Ala Gln Gly Trp Gly Ala Ala Pro Lys Ala 85 90 95 Ile Gly Cys Ser Arg Gly His Met Gly Ser Ser Arg Pro Gly Asp Asn 100 105 110 Ala Glu Leu Asp Pro Ser Met Lys Tyr Thr Leu Asp Val Glu Asp Trp 115 120 125 Ser Ile Lys Lys Arg Asn Lys Cys 130 135

<210> 3652

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3652

Met Ala Ala Met Glu Thr Glu Thr Ala Pro Leu Thr Leu Glu Ser Leu

1 5 10 15

Pro Thr Asp Pro Leu Leu Leu Ile Leu Ser Phe Leu Asp Tyr Arg Asp
20 25 30

Leu Ile Asn Arg Arg Leu Ser Gln Leu Ser Ser His Asp Pro Leu Trp

		35					40					45			
Arg	Arg	His	Cys	Lys	Lys	Tyr	Trp	Leu	Ile	Ser	Glu	Glu	Glu	Lys	Thr
	50					55					60				
Gln	Lys	Asn	Gln	Cys	Trp	Lys	Ser	Leu	Phe	Ile	Asp	Thr	Tyr	Ser	Asp
65					70					75					80
Val	Gly	Arg	Tyr	Ile	Asp	His	Tyr	Ala	Ala	Ile	Lys	Lys	Ala	Trp	Asp
				85					90					95	
Asp	Leu	Lys	Lys	Tyr	Leu	Glu	Pro	Arg	Cys	Pro	Arg	Met	Val	Leu	Ser
			100					105					110		
Leu	Lys	Glu	Gly	Ala	Arg	Glu	Glu	Asp	Leu	Asp	Ala	Val	Glu	Ala	Gln
		115					120					125			
Ile	Gly	Cys	Lys	Leu	Pro	Asp	Asp	Tyr	Arg	Cys	Ser	Tyr	Arg	Ile	His
	130					135					140				
Asn	Gly	Gln	Lys	Leu	Val	Val	Pro	Gly	Leu	Leu	Gly	Ser	Met	Ala	Leu
145					150					155					160
Ser	Asn	His	Tyr	Arg	Ser	Glu	Asp	Leu	Leu	Asp	Val	Asp	Thr	Ala	Ala
				165					170					175	
Gly	Gly	Phe	Gln	Gln	Arg	Gln	Gly	Leu	Lys	Tyr	Cys	Leu	Pro	Leu	Thr
			180					185					190		
Phe	Cys	Ile	His	Thr	Gly	Leu	Ser	Gln	Tyr	Ile	Ala	Val	Glu	Ala	Ala
		195					200					205			
Glu	Gly	Arg	Asn	Lys	Asn	Glu	Val	Phe	Tyr	Gln	Cys	Pro	Asp	Gln	Met
	210					215					220				
Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met	Phe	Ile	Ile	Gly	Ala	Thr	Phe
225					230					235					240
Thr	Asp	Trp	Phe	Thr	Ser	Tyr	Val	Lys	Asn	Val	Val	Ser	Gly	Gly	Phe
				245					250					255	
Pro	Ile	Ile	Arg	Asp	Gln	Ile	Phe	Arg	Tyr	Val	His	Asp	Pro	Glu	Cys
			260					265					270		

Val Ala Thr Thr Gly Asp Ile Thr Val Ser Val Ser Thr Ser Phe Leu Pro Glu Leu Ser Ser Val His Pro Pro His Tyr Phe Phe Thr Tyr Arg Ile Arg Ile Glu Met Ser Lys Asp Ala Leu Pro Glu Lys Ala Cys Gln Leu Asp Ser Arg Tyr Trp Arg Ile Thr Asn Ala Lys Gly Asp Val Glu Glu Val Gln Gly Pro Gly Val Val Gly Glu Phe Pro Ile Ile Ser Pro Gly Arg Val Tyr Glu Tyr Thr Ser Cys Thr Thr Phe Ser Thr Thr Ser Gly Tyr Met Glu Gly Tyr Tyr Thr Phe His Phe Leu Tyr Phe Lys Asp Lys Ile Phe Asn Val Ala Ile Pro Arg Phe His Met Ala Cys Pro Thr Phe Arg Val Ser Ile Ala Arg Leu Val Ser

<210> 3653

<211> 869

<212> PRT

<213> Homo sapiens

<400> 3653

Met Gly Lys Val Tyr Arg Ala Asp Arg Lys Ser Val Gln Arg Ile Lys

1 5 10 15

Ala Arg Asp Ile Val Pro Gly Asp Ile Val Glu Val Ala Val Gly Asp

			20					25					30		
Lys	Val	Pro	Ala	Asp	Ile	Arg	Ile	Leu	Ala	Ile	Lys	Ser	Thr	Thr	Leu
		35					40					45			
Arg	Val	Asp	Gln	Ser	Ile	Leu	Thr	Gly	Glu	Ser	Val	Ser	Val	Ile	Lys
	50					55					60				
His	Thr	Glu	Pro	Val	Pro	Asp	Pro	Arg	Ala	Val	Asn	Gln	Asp	Lys	Lys
65					70					75					80
Asn	Met	Leu	Phe	Ser	Gly	Thr	Asn	Ile	Ala	Ala	Gly	Lys	Ala	Leu	Gly
				85					90					95	
Ile	Val	Ala	Thr	Thr	Gly	Val	Gly	Thr	Glu	Ile	Gly	Lys	Ile	Arg	Asp
			100					105					110		
Gln	Met	Ala	Ala	Thr	Glu	Gln	Asp	Lys	Thr	Pro	Leu	Gln	Gln	Lys	Leu
		115					120					125		•	
Asp	Glu	Phe	Gly	Glu	Gln	Leu	Ser	Lys	Val	Ile	Ser	Leu	Ile	Cys	Val
	130					135					140				
Ala	Val	Trp	Leu	Ile	Asn	Ile	Gly	His	Phe	Asn	Asp	Pro	Val	His	Gly
145					150					155					160
Gly	Ser	Trp	Phe	Arg	Gly	Ala	Ile	Tyr	Tyr	Phe	Lys	Ile	Ala	Val	Ala
				165					170					175	
Leu	Ala	Val	Ala	Ala	Ile	Pro	Glu	Gly	Leu	Pro	Ala	Val	Ile	Thr	Thr
			180					185					190		
Cys	Leu	Ala	Leu	Gly	Thr	Arg		Met	Ala	Lys	Lys		Ala	Ile	Val
		195					200					205			
Arg	Ser	Leu	Pro	Ser	Val	Glu	Thr	Leu	Gly	Cys		Ser	Val	Ile	Cys
	210					215					220				
	Asp	Lys	Thr	Gly		Leu	Thr	Thr	Asn		Met	Ser	Val	Cys	
225					230					235	_	_	_		240
Met	Phe	Ile	Ile		Lys	Val	Asp	Gly		Ile	Cys	Leu	Leu		Glu
				245					250					255	

Phe	Ser	Ile	Thr	Gly	Ser	Thr	Tyr	Ala	Pro	Glu	Gly	Glu	Val	Leu	Lys
			260					265					270		
Asn	Asp	Lys	Pro	Val	Arg	Pro	Gly	Gln	Tyr	Asp	Gly	Leu	Val	Glu	Leu
		275					280					285			
Ala	Thr	Ile	Cys	Ala	Leu	Cys	Asn	Asp	Ser	Ser	Leu	Asp	Phe	Asn	Glu
	290					295					300				
Ala	Lys	Gly	Val	Tyr	Glu	Lys	Val	Gly	Glu	Ala	Thr	Glu	Thr	Ala	Leu
305					310					315					320
Thr	Thr	Leu	Val-	Glu	Lys	Met	Asn	Val	Phe	Asn	Thr	Asp	Val	Arg	Ser
				325					330					335	
Leu	Ser	Lys	Val	Glu	Arg	Ala	Asn	Ala	Cys	Asn	Ser	Val	Ile	Arg	Gln
			340					345					350		
Leu	Met	Lys	Lys	Glu	Phe	Thr	Leu	Glu	Phe	Ser	Arg	Asp	Arg	Lys	Ser
		355					360					365			
Met	Ser	Val	Tyr	Cys	Ser	Pro	Ala	Lys	Ser	Ser	Arg	Ala	Ala	Val	Gly
	370					375					380				
Asn	Lys	Met	Phe	Val	Lys	Gly	Ala	Pro	Glu	Gly	Val	Ile	Asp	Arg	Cys
385					390					395					400
Asn	Tyr	Val	Arg	Val	Gly	Thr	Thr	Arg	Val	Pro	Leu	Thr	Gly	Pro	Val
				405					410					415	
Lys	Glu	Lys	Ile	Met	Ala	Val	Ile	Lys	Glu	Trp	Gly	Thr	Gly	Arg	Asp
			420					425					430		
Thr	Leu	Arg	Cys	Leu	Ala	Leu		Thr	Arg	Asp	Thr		Pro	Lys	Arg
		435					440					445			
Glu	Glu	Met	Val	Leu	Asp	Asp	Ser	Ala	Arg	Phe		Glu	Tyr	Glu	Thr
	450					455					460				
Asp	Leu	Thr	Phe	Val	Gly	Val	Val	Gly	Met	Leu	Asp	Pro	Pro	Arg	Lys
465					470					475					480
Glu	Val	Thr	Gly	Ser	Ile	Gln	Leu	Cys	Arg	Asp	Ala	Gly	Ile	Arg	Val

				485					490					495	
Ile	Met	Ile	Thr	Gly	Asp	Asn	Lys	Gly	Thr	Ala	Ile	Ala	Ile	Cys	Arg
			500					505					510		
Arg	Ile	Gly	Ile	Phe	Gly	Glu	Asn	Glu	Glu	Val	Ala	Asp	Arg	Ala	Tyr
		515					520					525			
Thr	Gly	Arg	Glu	Phe	Asp	Asp	Leu	Pro	Leu	Ala	Glu	Gln	Arg	Glu	Ala
	530					535					540				
Cys	Arg	Arg	Ala	Cys	Cys	Phe	Ala	Arg	Val	Glu	Pro	Ser	His	Lys	Ser
545					550					555					560
Lys	Ile	Val	Glu	Tyr	Leu	Gln	Ser	Tyr	Asp	Glu	Ile	Thr	Ala	Met	Thr
				565					570					575	
Gly	Asp	Gly	Val	Asn	Asp	Ala	Pro	Ala	Leu	Lys	Lys	Ala	Glu	Ile	Gly
			580					585					590		
Ile	Ala	Met	Gly	Ser	Gly	Thr	Ala	Val	Ala	Lys	Thr	Ala	Ser	Glu	Met
		595					600					605			
Val	Leu	Ala	Asp	Asp	Asn	Phe	Ser	Thr	Ile	Val	Ala	Ala	Val	Glu	Glu
	610					615					620				
Gly	Arg	Ala	Ile	Tyr	Asn	Asn	Met	Lys	Gln	Phe	Ile	Arg	Tyr	Leu	Ile
625					630					635					640
Ser	Ser	Asn	Val	Gly	Glu	Val	Val	Cys	Ile	Phe	Leu	Thr	Ala	Ala	Leu
				645					650					655	
Gly	Leu	Pro	Glu	Ala	Leu	Ile	Pro	Val	Gln	Leu	Leu	Trp	Val	Asn	Leu
			660					665					670		
Val	Thr	Asp	Gly	Leu	Pro	Ala	Thr	Ala	Leu	Gly	Phe	Asn	Pro	Pro	Asp
		675					680					685			
Leu	Asp	Ile	Met	Asp	Arg	Pro	Pro	Arg	Ser	Pro	Lys	Glu	Pro	Leu	Ιle
	690					695					700				
Ser	Gly	Trp	Leu	Phe	Phe	Arg	Tyr	Met	Ala	Ile	Gly	Gly	Tyr	Val	Gly
705					710					715					720

Ala Ala Thr Val Gly Ala Ala Ala Trp Trp Phe Leu Tyr Ala Glu Asp
725 730 735

Gly Pro His Val Asn Tyr Ser Gln Leu Thr His Phe Met Gln Cys Thr
740 745 750

Glu Asp Asn Thr His Phe Glu Gly Ile Asp Cys Glu Val Phe Glu Ala 755 760 765

Pro Glu Pro Met Thr Met Ala Leu Ser Val Leu Val Thr Ile Glu Met 770 775 780

Cys Asn Ala Leu Asn Ser Leu Ser Glu Asn Gln Ser Leu Leu Arg Met
785 790 795 800

Pro Pro Trp Val Asn Ile Trp Leu Leu Gly Ser Ile Cys Leu Ser Met 805 810 815

Ser Leu His Phe Leu Ile Leu Tyr Val Asp Pro Leu Pro Met Ile Phe 820 825 830

Lys Leu Arg Ala Leu Asp Leu Thr Gln Trp Leu Met Val Leu Lys Ile 835 840 845

Ser Leu Pro Val Ile Gly Leu Asp Glu Ile Leu Lys Phe Val Ala Arg 850 855 860

Asn Tyr Leu Glu Gly

865

<210> 3654

<211> 205

<212> PRT

<213> Homo sapiens

<400> 3654

Met Arg Glu Pro Leu Ile Pro Pro Cys Lys Ala Ala Ser Leu Ser Glu

Gln Glu Gln Val Arg Gly Glu Cys Gly Met Met Thr Ala Gln Gly Ile Leu Gly Pro Arg Gly Lys Ser Lys Leu Pro Val Leu Pro Asp Pro Arg Leu Ile Cys Arg Tyr Met Cys Ser Cys Arg Glu Ile Pro Gly Val Ile Ser Thr Pro Val Pro His Ser Ala Gly Pro Gln Val Thr Arg Phe His Ser Pro Ser Pro Pro His Ile Ser Glu Leu Ser Gln Thr Leu His Ala Pro Phe Gln Gly Ser Trp Pro Arg Pro Cys His Ala Leu Ser Gly Pro Arg Ala Met Val Pro Asn Gln Leu His Pro Gly Thr Pro Cys Pro Ala His Val Pro His Ser Cys Thr Met Pro Ala Gly Thr Cys Pro Leu Phe Thr Gly Ala Pro Ala Ala Ala Glu Ala Gly Leu Asn Pro Gly Pro Ala Leu Arg Ala Pro Thr Ser Cys Ser Ser Ser Thr Trp Pro Lys Pro Phe Met Thr Val Cys Leu Leu Pro Thr Ser Ser Met Leu Thr Ser Pro Gly Thr Gly Gly Cys Ile Arg Ala Arg Ile Leu Glu Pro Ala

<210> 3655

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3655

Met Leu Cys Cys Pro Arg Leu Gly His Trp Glu Pro Arg Glu Val Cys

1 5 10 15

Phe Tyr Val Leu Leu Thr Tyr Pro Phe Ile Phe Ser Ala Arg Pro Phe

20 25 30

Trp Tyr His Lys Met Leu Gln Ala His Leu Met Leu Phe Leu Pro Ser

35 40 45

Phe Gly Thr Ile Pro Leu Leu Lys Glu Ala Leu Val Pro Phe Ile Gly

50 55 60

Glu Leu Tyr Leu Glu Thr Thr Leu Trp Val Leu Asp Val Leu Ile Gly

65 70 75 80

Phe Gly Met Arg Leu Val Val Leu Leu Leu Leu Phe Trp Gly Gly

85 90 95

Val Leu Leu Cys Leu Pro Gly Trp Ser Ala Met Ala Arg Ser Trp Leu

100 105 110

Ala Ala Thr Phe Ala Ser Arg Val Gln Ser Ile Pro Val Pro Gln Pro

115 120 125

Pro Lys

130

<210> 3656

<211> 213

<212> PRT

<213> Homo sapiens

<400> 3656 Met Asp Thr Glu Arg Val Gly Asp Gly Lys Gln His Arg Arg Lys Gln Ser Gln Arg Leu Arg Trp Pro Cys Cys Leu Ala Leu Val Pro Asp Arg His Pro Ser Gln Leu Ser Ser Cys Thr Leu Cys Leu Leu Ala Ala Ala Ser Gln Trp Glu Ser Trp Ala His Phe Ser Lys Trp His Thr Glu Ala Ser Thr Gly Thr His Leu Gly Lys Ala Lys Ala Glu Gly Leu Gly Cys Thr Val Lys Asn Thr Pro Gln Leu Ser Ile Cys Glu Pro Ser His Phe Gly Pro Ser Phe Val His Ser Pro His Leu Leu Val Asp His Asp His Arg Ala Gly Ala Ala Thr Gly Arg Gly Gln Ala Gly Pro Ser Arg Ala

Ser Ser Val Ser Pro Thr Phe Cys Pro Pro Thr Thr Ser His His Pro

Val Cys Ala Lys Gly Thr Asp Pro Val Leu Val Leu Gln Glu Glu Glu

Gln Asp Leu Asp Gly Glu Lys Gly Pro Ser Ser Glu Gly Pro Glu Glu

Glu Asp Gly Glu Gly Phe Ser Phe Lys Tyr Ser Pro Gly Lys Leu Arg

Gly Asn Gln Tyr Lys Lys Met Met Thr Lys Glu Glu Leu Glu Glu Glu

Gln Arg Thr Glu Glu

<210> 3657

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3657

Met Asn Ser Pro Pro Val Leu Ser Leu Leu Ser Gln His Gln Ile Ile

1 5 10 15

Leu Gln Pro Leu Ala Ile Trp Leu Leu Ser Leu Val Met Leu Leu Ser

20 25 30

Tyr Leu Ser Gln Arg Ile Ser Ile Gly His Pro Thr Ile Ile Ala Ile

35 40 45

Gly Leu Gln Pro Ser Leu Leu Thr Gly Tyr Ser Leu Pro Gly Gly Ile

50 55 60

Phe Leu Ser Phe Leu Pro Leu Phe Leu Phe Gly Trp Arg Tyr Phe

65 70 75 80

Phe Gln Ser Leu Lys Gly Ser Ser Leu Leu Gly Asp Leu Leu Asn Arg

85 90 95

Met Phe Ile Ala Cys Met Ser Leu Ala Lys Arg Cys Leu Glu Phe Pro

100 105 110

Ser Gly Ile Tyr

115

<210> 3658

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3658

Met Lys Tyr Leu Ser Tyr Leu Leu Tyr Pro Leu Cys Val Gly Gly Ala

1 5 10 15

Val Tyr Ser Leu Leu Asn Ile Lys Tyr Lys Ser Trp Tyr Ser Trp Leu

20 25 30

Ile Asn Ser Phe Val Asn Gly Val Tyr Ala Phe Gly Phe Leu Phe Met

35 40 45

Leu Pro Gln Leu Phe Val Asn Tyr Lys Leu Lys Ser Val Ala His Leu

50 55 60

Pro Trp Lys Ala Phe Thr Tyr Lys Ala Phe Asn Thr Phe Ile Asp Asp

65 70 75 80

Val Phe Ala Phe Ile Ile Thr Met Pro Thr Ser His Arg Leu Ala Cys

85 90 95

Phe Arg Asp Asp Val Val Phe Leu Val Tyr Leu Tyr Gln Arg Trp Leu

100 105 110

Tyr Pro Val Asp Lys Arg Arg Val Asn Glu Phe Gly Glu Ser Tyr Glu

115 120 125

Glu Lys Ala Thr Arg Ala Pro His Thr Asp

130 135

<210> 3659

<211> 173

<212> PRT

<213> Homo sapiens

<400> 3659

Met Gly Arg Leu Asp Gly Lys Val Ile Ile Leu Thr Ala Ala Ala Gln Gly Ile Gly Gln Ala Ala Ala Leu Ala Phe Ala Arg Glu Gly Ala Lys Val Ile Ala Thr Asp Ile Asn Glu Ser Lys Leu Gln Glu Leu Glu Lys Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Arg Lys Gln Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met Ile Lys Ala Phe Leu Pro Arg Met Leu Ala Gln Lys Ser Gly Asn Ile Ile Asn Met Ser Ser Ala Ala Ser Ser Val Lys Gly Gly Ser Val Ser Phe Arg Gly Leu Arg Cys Ser Tyr Thr His Ile Ile Lys Ser Ser Ala Phe Gly Asn Arg His Ser Arg Asp Tyr Asn Phe Lys Tyr

<210> 3660

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3660 Met Asp Ala Gln Asp Cys Gln Ala Ala Ala Ser Pro Glu Pro Pro Gly Pro Pro Ala Arg Ser Cys Val Ala Ala Trp Trp Asp Met Val Asp Arg Asn Leu Arg His Thr Val Pro Ser Cys Arg Gly Glu Asp Ala Lys Gly

Lys Asp Cys Cys Trp Tyr Glu Ala Ala Leu Arg Asp Gly Asn Pro Ile

Ile Val Tyr Leu His Gly Ser Ala Glu His Arg Ala Ala Ser His Arg

Leu Lys Leu Val Lys Val Leu Ser Asp Gly Gly Phe His Val Leu Ser

Val Asp Tyr Arg Gly Phe Gly Asp Ser Thr Gly Lys Pro Thr Glu Glu

Gly Leu Thr Thr Asp Ala Ile Cys Val Tyr Glu Trp Thr Lys Ala Arg

Ser Gly Ile Thr Pro Val Cys Leu Trp Gly His Ser Leu Gly Thr Gly

Val Ala Thr Asn Ala Ala Lys Val Leu Glu Glu Lys Gly Cys Pro Val

Asp Ala Ile Val Leu Glu Ala Pro Phe Thr Asn Met Trp Val Ala Ser

Ile Asn Tyr Pro Leu Leu Lys Ser Leu Ala Leu Ser Ser Arg Leu Glu

Cys Ser Gly Val Ile Ser Ala His Cys Lys Leu Arg Phe Pro Gly Ser

Arg His Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Thr Thr Gly Ala

Arg His His Ala Trp Leu Ile Phe Leu Cys Phe

<210> 3661

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3661

Met Glu Lys Cys Thr Lys Ser Ser Ser Thr Met Gln Val Glu Pro Ser

Phe Leu Gln Ala Glu Asn Leu Ile Leu Arg Pro Gln Met Gln His Pro

Thr Thr Glu Asn Thr Ala Lys Arg Gly Gln Val Met Pro Ala Leu Ala

Thr Thr Val Met Pro Val Pro Tyr Ser Leu Glu His Leu Thr Gln Phe

His Gly Asp Pro Ala Asn Cys Ser Glu Phe Leu Thr Gln Val Thr Thr

Tyr Leu Thr Ala Leu Gln Ile Ser Asn Pro Ala Asn Asp Ala Gln Ile

Lys Leu Phe Phe Asp Tyr Leu Ser Gln Gln Leu Glu Ser Cys Gly Ile

Ile Ser Gly Pro Asp Lys Ser Thr Leu Leu Lys Gln Tyr Glu Asn Leu

Ile Leu Glu Phe Gln Gln Ser Phe Gly Lys Pro Thr Lys Gln Glu Ile

Asn Pro Leu Met Asn Ala Lys Phe Asp Lys Gly Asp Asn Ser Ser Gln

Gln Asp Pro Ala Thr Phe His Leu Leu Ala Gln Asn Leu Ile Cys Asn Glu Thr Asn Gln Ser Gly Gln Phe Glu Lys Ala Leu Ala Asp Pro Asn Gln Asp Glu Glu Ser Val Thr Asp Met Met Asp Asn Leu Pro Asp Leu Ile Thr Gln Cys Ile Gln Leu Asp Lys Lys His Ser Asp Arg Pro Glu Leu Leu Gln Ser Glu Thr Gln Leu Pro Leu Leu Ala Ser Leu Ile Gln His Gln Ala Leu Phe Ser Pro Thr Asp Pro Pro Pro Lys Lys Gly Pro Ile Gln Leu Arg Glu Gly Gln Leu Pro Leu Thr Pro Ala Lys Arg Ala Arg Gln Gln Glu Thr Gln Leu Cys Leu Tyr Cys Ser Gln Ser Gly His Phe Thr Arg Asp Cys Leu Ala Lys Arg Ser Arg Ala Pro Ala Thr Thr Asn Asn Thr Ala His Gln

<210> 3662

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3662

Met Ser Lys Leu Pro Thr Asp Ser Ser Val Pro Gln Thr Gly Ala Ala Asn Gly Asp Arg Asp Val Pro Gln Ala Glu Val Gly Arg Gly Arg Arg Glu Pro Ala Pro Ala Gln Pro Glu Glu Ala Arg Glu Ser Pro Ala Ala Ala Ala Ala Arg Glu Ala Arg Met Ala Glu Val Ala Arg Leu Leu Gly Glu Pro Val Asp Glu Glu Gly Pro Glu Gly Arg Pro Arg Ser Arg His Gly Asn Gly Gly Leu Ala Ala Leu Pro Tyr Leu Arg Leu Arg His Pro Leu Ser Val Leu Gly Ile Asn Tyr Gln Gln Phe Leu Arg His Tyr Leu Glu Asn Tyr Pro Ile Ala Pro Gly Arg Ile Gln Glu Leu Glu Glu Arg Arg Arg Arg Phe Val Glu Ala Cys Arg Ala Arg Glu Ala Ala Phe Asp Ala Glu Tyr Gln Arg Asn Pro His Arg Val Asp Leu Asp Ile Leu Thr Phe Thr Ile Ala Leu Thr Ala Ser Glu Val Ile Asn Pro Leu Ile Glu Glu Leu Gly Cys Asp Lys Phe Ile Asn Arg Glu

<210> 3663

<211> 573

<212> PRT

<213> Homo sapiens

<400> 3663

Met Ser Gly Glu Leu Ala Val Cys Arg Val Thr Glu Gly Ala Ser Cys

1 5 10 15

Met Ser Glu Leu Ala Val Trp Arg Val Thr Glu Gly Ala Ser Cys Met

20 25 30

Ser Gly Glu Pro Ala Val Cys Arg Val Thr Glu Gly Ala Gly Cys Met

35 40 45

Ser Glu Leu Ala Val Cys Arg Val Thr Glu Gly Ala Ser Cys Met Ser

50 55 60

Gly Glu Leu Ala Val Trp Arg Val Thr Glu Gly Ala Ser Cys Met Ser

65 70 75 80

Gly Glu Leu Ala Val Cys Arg Val Thr Glu Gly Pro Gly Cys Met Ser

85 90 95

Gly Leu Leu Ala Val Cys Arg Val Thr Glu Gly Ala Gly Cys Met Ser

100 105 110

Gly Glu Leu Ala Val Cys Arg Val Thr Glu Gly Ala Ser Cys Met Ser

115 120 125

Gly Glu Leu Ala Val Cys Arg Val Thr Glu Gly Ala Gly Cys Met Ser

130 135 140

Gly Leu Leu Ala Val Cys Arg Val Thr Glu Gly Ala Gly Cys Met Ser

145 150 155 160

Gly Glu Leu Ala Val Cys Arg Val Thr Glu Gly Ala Ser Cys Met Ser

165 170 175

Gly Glu Leu Pro Val Trp Arg Val Thr Glu Gly Ala Gly Arg Met Ser

180 185 190

Gly Glu Leu Ala Val Cys Gly Val Thr Glu Gly Ala Gly Cys Met Ser

195 200 205

Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
	210					215					220				
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
225					230					235					240
Gly	Glu	Leu	Thr	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
				245					250					255	
Gly	Glu	Leu	Ala	Val	Trp	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
			260					265					270		
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
		275					280					285			
Gly	Glu	Leu	Ala	Val	Trp	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
	290					295					300				
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Ser	Cys	Met	Ser
305					310					315					320
Gly	Glu	Leu	Pro	Val	Trp	Arg	Val	Thr	Glu	Gly	Ala	Ser	Cys	Met	Ser
				325					330					335	
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
			340					345					350		
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
		355					360					365			
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
	370					375					380				
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
385					390					395					400
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Gly	Cys	Met	Ser
				405					410					415	
Gly	Glu	Leu	Ala	Val	Cys	Thr	Val	Thr	Glu	Gly	Ala	Ser	Cys	Met	Ser
			420					425					430		
Gly	Glu	Leu	Ala	Val	Cys	Arg	Val	Thr	Glu	Gly	Ala	Arg	Cys	Met	Ser

Gly Glu Pro Ala Val Trp Arg Val Thr Glu Gly Ala Gly Cys Met Ser Gly Glu Leu Ala Val Trp Arg Val Thr Glu Gly Ala Gly Cys Met Ser Glu Leu Ala Val Trp Arg Val Thr Glu Gly Ala Gly Cys Met Ser Gly Glu Leu Ala Val Cys Thr Val Thr Glu Gly Ala Ser Cys Met Ser Gly Glu Leu Ala Val Cys Arg Val Thr Glu Gly Pro Cys Cys Val Ser Gly Glu Leu Ala Val Cys Arg Val Thr Glu Gly Pro Cys Cys Ile Ser Gly Glu Cys Ile Arg Ser Val Leu Ile Cys Leu Ile Pro Asp His Val Ser Thr Gln Asp Thr Cys Val Cys Val Lys Gly Val Arg Ser

<210> 3664

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3664

Met Asp Glu Gln Cys Arg Phe Asp Phe Gly Ser Gly Tyr Gln Thr Cys

1 5 10 15

Leu Ala Phe Arg Thr Phe Glu Pro Cys Lys Gln Leu Trp Cys Ser His

20 25 30

Pro	Asp	Asn	Pro	Tyr	Phe	Cys	Lys	Thr	Lys	Lys	Gly	Pro	Pro	Leu	Asp
		35					40					45			
Gly	Thr	Glu	Cys	Ala	Pro	Gly	Lys	Trp	Cys	Phe	Lys	Gly	His	Cys	Ile
	50					55					60				
Trp	Lys	Ser	Pro	Glu	Gln	Thr	Tyr	Gly	Gln	Asp	Gly	Gly	Trp	Ser	Ser
65					70					75					80
Trp	Thr	Lys	Phe	Gly	Ser	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Arg
				85					90					95	
Ser	Arg	Ser	Arg	Ser	Cys	Asn	Asn	Pro	Ser	Pro	Ala	Tyr	Gly	Gly	Arg
			100					105					110		
Leu	Cys	Leu	Gly	Pro	Met	Phe	Glu	Tyr	Gln	Val	Cys	Asn	Ser	Glu	Glu
		115					120					125			
Cys	Pro	Gly	Thr	Tyr	Glu	Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ala	Lys	Arg
	130					135					140				
Asn	Ser	Tyr	Tyr	Val	His	Gln	Asn	Ala	Lys	His	Ser	Trp	Val	Pro	Tyr
145					150					155					160
Glu	Pro	Asp	Asp	Asp	Ala	Gln	Lys	Cys	Glu	Leu	Ile	Cys	Gln	Ser	Ala
				165					170					175	
Asp	Thr	Gly	Asp	Val	Val	Phe	Met	Asn	Gln	Val	Val	His	Asp	Gly	Thr
			180					185					190		
Arg	Cys	Ser	Tyr	Arg	Asp	Pro	Tyr	Ser	Val	Cys	Ala	Arg	Gly	Glu	Cys
		195					200					205			
Val	Pro	Val	Gly	Cys	Asp	Lys	Glu	Val	Gly	Ser	Met	Lys	Ala	Asp	Asp
	210					215					220				
Lys	Cys	Gly	Val	Cys	Gly	Gly	Asp	Asn	Ser	His	Cys	Arg	Thr	Val	Lys
225					230	·				235					240
Gly	Thr	Leu	Gly	Lys	Ala	Ser	Lys	Gln	Ala	Gly	Ala	Leu	Lys	Leu	Val
				245					250					255	
Gln	Ile	Pro	Ala	Gly	Ala	Arg	His	Ile	Gln	Ile	Glu	Ala	Leu	Glu	Lys

Ser Pro His Arg Ile Gly Glu Cys Trp Gly Ala Gly Arg Gly Gln Gln Gly Pro Arg Pro Cys Pro Leu Thr Trp Gly Ser Trp Glu Thr Arg Gly Gln Asp Ser Ser Thr Ser Gly Ile Val Leu Thr Gly Val Met Gly Arg Asp Pro Leu Phe Ile Leu Phe <210> 3665 <211> 117 <212> PRT <213> Homo sapiens <400> 3665

Ala Leu Arg Lys Lys Gln Leu Lys Arg Gln Lys Arg Asp Tyr Ile His Ser Leu Lys Leu Leu Asn Val Leu Glu Glu Tyr Ile Thr Asp Glu Gln Lys Glu Glu Glu Glu Glu Glu Glu Glu Glu Leu Ile Arg Ile Phe Gln Glu Gln Gln Lys Lys Trp Gln Gln Tyr Arg Ser Val Arg Arg

Glu Arg Leu Lys Glu Met Lys Leu Leu Arg Asp Gln Phe Val Lys Ala

Met Lys Met Asp Lys Thr Cys Ser Lys Thr Lys Asn Lys Ser Lys His

Leu Glu Asp Phe Glu Asp Leu Cys Asp Arg Val Phe Ser Asp Glu Asp 100 105 110

Ser Glu Leu Asp Asn

115

<210> 3666

<211> 634

<212> PRT

<213> Homo sapiens

<400> 3666

Met Gly Leu Pro Leu Pro Ser Lys Val Ile Met His Phe Met Ser Ile

1 5 10 15

Ser Val Leu Gly Cys Trp His Gly Ala Lys Asp Glu Glu Ala Pro Ser
20 25 30

Lys Gln Cys Val Ser Val Gly Val Ser Gln Val Thr Thr Leu Lys Pro
35 40 45

Ala Leu Ser Thr Gln Lys Ala Gln Pro Cys Glu Thr Cys Ser Ser Leu
50 55 60

Leu Lys Asp Ile Leu His Leu Ala Glu His Asp Gly Thr His Pro Lys
65 70 75 80

Arg Thr Ala Lys Leu Tyr Leu His Gln Lys Glu His Leu Arg Glu Lys

85 90 95

Leu Thr Arg Ser Asp Glu Gly Arg Pro Ser Phe Val Asn Asp Ser Val
100 105 110

His Leu Ala Lys Arg Asn Leu Thr Cys Met Gln Gly Gly Lys Asp Phe
115 120 125

Thr Gly Asp Ser Asp Leu Gln Gln Gln Ala Leu His Ser Gly Trp Lys

	130					135					140				
Pro	His	Arg	Asp	Thr	His	Gly	Val	Glu	Ala	Phe	Gln	Ser	Gly	Gln	Asn
145	-				150					155					160
Asn	Tyr	Ser	Cys	Thr	Gln	Cys	Gly	Lys	Asp	Phe	Cys	His	Gln	His	Thr
				165					170					175	
Leu	Phe	Glu	His	Gln	Lys	Ile	His	Thr	Glu	Glu	Arg	Pro	Tyr	Glu	Cys
			180					185					190		
Ser	Glu	Cys	Gly	Lys	Leu	Phe	Arg	Tyr	Asn	Ser	Asp	Leu	Ile	Lys	His
		195					200					205			
Gln	Arg	Asn	His	Thr	Gly	Glu	Arg	Pro	Tyr	Lys	Cys	Ser	Glu	Cys	Gly
	210					215					220				
Lys	Ala	Phe	Ser	Leu	Lys	Tyr	Asn	Val	Val	Gln	His	Gln	Lys	Ile	His
225					230					235					240
Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Ala	Phe	Leu
				245					250					255	
Arg	Lys	Ser	His	Leu	Leu	Gln	His	Gln	Arg	Ile	His	Thr	Arg	Pro	Arg
			260					265		•			270		
Pro	Tyr	Val	Cys	Ser	Glu	Cys	Gly	Lys	Ala	Phe	Leu	Thr	Gln	Ala	His
		275					280					285			
Leu	Val	Gly	His	Gln	Lys	Ile	His	Thr	Gly	Glu	Arg	Pro	Tyr	Gly	Cys
	290					295					300				
Asn	Glu	Cys	Gly	Lys	Tyr	Phe	Met	Tyr	Ser	Ser	Ala	Leu	Ile	Arg	His
305					310					315					320
Gln	Lys	Val	His	Thr	Gly	Glu	Arg	Pro	Phe	Tyr	Cys	Cys	Glu	Cys	Gly
				325					330					335	
Lys	Phe	Phe	Met	Asp	Ser	Cys	Thr	Leu	Ile	Ile	His	Gln	Arg	Val	His
			340					345					350		
Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Phe	Phe	Arg
		355					360					365			

Tyr	Arg	Ser	Thr	Leu	Ile	Arg	His	Gln	Lys	Val	His	Thr	Gly	Glu	Lys
	370					375					380				
Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Phe	Phe	Met	Asp	Thr	Ser	Thr
385					390					395					400
Leu	Ile	Ile	His	Gln	Arg	Val	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys
				405					410					415	
Asn	Lys	Cys	Gly	Lys	Phe	Phe	Arg	Tyr	Cys	Phe	Thr	Leu	Asn	Arg	His
			420					425					430		
Gln	Arg	Val	His	Ser	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly
		435					440					445			
Lys	Phe	Phe	Val	Asp	Ser	Cys	Thr	Leu	Lys	Ser	His	Gln	Arg	Val	His
	450					455					460				
Thr	Gly	Glu	Arg	Pro	Phe	Glu	Cys	Ser	Ile	Cys	Gly	Lys	Ser	Phe	Arg
465					470					475					480
Cys	Arg	Ser	Thr	Leu	Asp	Thr	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Arg
				485					490					495	
Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Phe	Phe	Arg	His	Asn	Ser	Asn
			500					505					510		
His	Ile	Arg	His	Arg	Arg	Asn	His	Phe	Gly	Glu	Gly	Ser	Phe	Glu	Cys
		515					520					525			
Thr	Glu	Cys	Gly	Arg	Val	Phe	Ser	Gln	Asn	Ser	His	Leu	Ile	Arg	His
	530					535					540				
Gln	Lys	Val	His	Thr	Arg	Glu	Arg	Thr	Tyr	Lys	Cys	Ser	Lys	Cys	Gly
545					550					555					560
Lys	Phe	Phe	Met	Asp	Ser	Ser	Thr	Leu	Ile	Ser	His	Glu	Arg	Val	His
				565					570					575	
Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Val	Phe	Arg
			580					585					590		
Tvr	Asn	Ser	Ser	Leu	He	Lvs	His	Arg	Arg	Ile	His	Thr	Glv	Glu	Arg

595 600 605

Pro Tyr Gln Cys Ser Glu Cys Gly Arg Val Phe Asn Gln Asn Ser His
610 620

Leu Ile Gln His Gln Lys Val His Thr Arg

625 630

<210> 3667

<211> 202

<212> PRT

<213> Homo sapiens

<400> 3667

Met Lys Lys Gly Pro Ser Gly Tyr Gly Phe Asn Leu His Ser Asp Lys

1 5 10 15

Ser Lys Pro Gly Gln Phe Ile Arg Ser Val Asp Pro Asp Ser Pro Ala 20 25 30

Glu Ala Ser Gly Leu Arg Ala Gln Asp Arg Ile Val Glu Val Asn Gly
35 40 45

Val Cys Met Glu Gly Lys Gln His Gly Asp Val Val Ser Ala Ile Arg
50 55 60

Ala Gly Gly Asp Glu Thr Lys Leu Leu Val Val Asp Arg Glu Thr Asp
65 70 75 80

Glu Phe Phe Lys Lys Cys Arg Val Ile Pro Ser Gln Glu His Leu Asn 85 90 95

Gly Pro Leu Pro Val Pro Phe Thr Asn Gly Glu Ile Gln Lys Glu Asn 100 105 110

Ser Arg Glu Ala Leu Ala Glu Ala Ala Leu Glu Ser Pro Arg Pro Ala 115 120 125 Leu Val Arg Ser Ala Ser Ser Asp Thr Ser Glu Glu Leu Asn Ser Gln 140 130 135 Asp Ser Pro Pro Lys Gln Asp Ser Thr Ala Pro Ser Ser Thr Ser Ser 155 160 150 145 Ser Asp Pro Ile Leu Asp Phe Asn Ile Ser Leu Ala Met Ala Lys Glu 165 170 175 Arg Ala His Gln Lys Arg Ser Ser Lys Arg Ala Pro Gln Met Asp Trp 190 180 185 Ser Lys Lys Asn Glu Leu Phe Ser Asn Leu 200 195

<210> 3668

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3668

Met Cys Phe Gln Asn Val Thr Trp Lys Ala Val Arg Pro Leu Cys Leu

1 5 10 15

Val Val Val Val Val Val Val Asn Arg Ser Lys Phe Phe Gln Thr
20 25 30

His His Arg Ser Gly Gln Thr Pro Lys Pro Ala Phe Pro Ala Thr
35 40 45

Gly Trp Leu Val Tyr Thr Arg Pro Ile Leu Tyr Glu Asn Ile Leu Lys
50 55 60

Val Thr Pro Val Asp Ser Tyr Lys Val Leu Pro Leu Ala Gly Arg Gly 65 70 75 80

Glu Ala Tyr Cys Pro Phe Gly Leu Glu Thr Ser Thr Val Val Asp Asn

85 90 95

Ile Leu Lys Arg Leu Leu Leu Asn Ser Phe Ala 100 105

<210> 3669

<211> 445

<212> PRT

<213> Homo sapiens

<400> 3669

Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala

1 5 10 15

Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly

20 25 30

Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg

35 40 45

Val Ala Pro Leu Arg Leu Asp Ala Asp Pro Ser Leu Gln Arg Val Arg

50 55 60

Gln Glu Glu Ser Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser

65 70 75 80

Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Leu Leu Glu

85 90 95

Thr Lys Trp Thr Leu Leu Gln Glu Gln Lys Ser Ala Lys Ser Ser Arg

100 105 110

Leu Pro Asp Ile Phe Glu Ala Gln Ile Ala Gly Leu Arg Gly Gln Leu

115 120 125

Glu Ala Leu Gln Val Asp Gly Gly Arg Leu Glu Ala Glu Leu Arg Ser

130 135 140

Met	Gln	Asp	Val	Val	Glu	Asp	Phe	Lys	Asn	Arg	Tyr	Glu	Asp	Glu	Ile
145					150					155					160
Asn	Arg	Arg	Thr	Ala	Ala	Glu	Asn	Glu	Phe	Val	Val	Leu	Lys	Lys	Asp
				165					170					175	
Val	Asp	Ala	Ala	Tyr	Met	Ser	Lys	Val	Glu	Leu	Glu	Ala	Lys	Val	Asp
			180					185					190		
Ala	Leu	Asn	Asp	Glu	Ile	Asn	Phe	Leu	Arg	Thr	Leu	Asn	Glu	Thr	Glu
		195					200					205			
Leu	Thr	Glu	Leu	Gln	Ser	Gln	Ile	Ser	Asp	Thr	Ser	Val	Val	Leu	Ser
	210					215					220				
Met	Asn	Asn	Ser	Arg	Ser	Leu	Asp	Leu	Asp	Gly	Ile	Ile	Ala	Glu	Val
225					230					235					240
Lys	Ala	Gln	Tyr	Glu	Glu	Met	Ala	Lys	Cys	Ser	Arg	Ala	Glu	Ala	Glu
				245					250					255	
Ala	Trp	Tyr	Gln	Thr	Lys	Phe	Glu	Thr	Leu	Gln	Ala	Gln	Ala	Gly	Lys
			260					265					270		
His	Gly	Asp	Asp	Leu	Arg	Asn	Thr	Arg	Asn	Glu	Ile	Ser	Glu	Met	Asn
		275					280					285			
Arg	Ala	Ile	Gln	Arg	Leu	Gln	Ala	Glu	Ile	Asp	Asn	Ile	Lys	Asn	Gln
	290					295					300				
Arg	Ala	Lys	Leu	Glu	Ala	Ala	Ile	Ala	Glu	Ala	Glu	Glu	Arg	Gly	Glu
305					310					315					320
Leu	Ala	Leu	Lys	Asp	Ala	Arg	Ala	Lys	Gln	Glu	Glu	Leu	Glu	Ala	Ala
				325					330					335	
Leu	Gln	Arg	Ala	Lys	Gln	Asp	Met	Ala	Arg	Gln	Leu	Arg	Glu	Tyr	Gln
			340					345					350		
Glu	Leu	Met	Ser	Val	Lys	Leu	Ala	Leu	Asp	Ile	Glu	Ile	Ala	Thr	Tyr
		355					360					365			
Arg	Lvs	Leu	Leu	Glu	Glv	Glu	Glu	Ser	Arg	Leu	Ala	Glv	Asp	Glv	Val

380 370 375 Gly Ala Val Asn Ile Ser Val Met Asn Ser Thr Gly Gly Ser Ser Ser 390 395 400 385 Gly Gly Gly Ile Gly Leu Thr Leu Gly Gly Thr Met Gly Ser Asn Ala 405 410 415 Leu Ser Phe Ser Ser Ser Ala Gly Pro Gly Leu Leu Lys Ala Tyr Ser 420 425 430 Ile Arg Thr Ala Ser Ala Ser Arg Arg Ser Ala Arg Asp 435 440 445

<210> 3670

<211> 492

<212> PRT

<213> Homo sapiens

<400> 3670

Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Lys Gly

1 5 10 15

Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
20 25 30

Pro Gly Gly Ser Arg Arg Leu Ser Cys Ala Ala Ser Ala Phe Thr Val
35 40 45

Ser Asn Asn Tyr Val Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 50 55 60

Glu Trp Val Ser Ile Ile Tyr Ser Ala Gly Asp Thr Tyr Tyr Ala Asp
65 70 75 80

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr

85 90 95

Leu	HIS	Leu	Gin	met	Asn	Ser	Leu	Arg	Ата	ASP	Asp	ınr	АТА	He	lyr
			100					105					110		
Tyr	Cys	Ala	Arg	Met	Gly	Gly	Gly	Phe	Leu	Gly	Asn	Ala	Phe	Glu	Ile
		115					120					125			
Trp	Gly	Gln	Gly	Thr	Leu	Met	Thr	Val	Ser	Ser	Ala	Ser	Pro	Thr	Ser
	130					135					140				
Pro	Lys	Val	Phe	Pro	Leu	Ser	Leu	Cys	Ser	Thr	Gln	Pro	Asp	Gly	Asn
145					150					155					160
Val	Val	Ile	Ala	Cys	Leu	Val	Gln	Gly	Phe	Phe	Pro	Gln	Glu	Pro	Leu
				165					170					175	
Ser	Val	Thr	Trp	Ser	Glu	Ser	Gly	Gln	Gly	Val	Thr	Ala	Arg	Asn	Phe
			180					185					190		
Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly	Asp	Leu	Tyr	Thr	Thr	Ser	Ser	Gln
		195					200					205			
Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys	Leu	Ala	Gly	Lys	Ser	Val	Thr	Cys
	210					215					220				
His	Val	Lys	His	Tyr	Thr	Asn	Pro	Ser	Gln	Asp	Val	Thr	Val	Pro	Cys
225					230					235					240
Pro	Val	Pro	Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser	Thr	Pro	Pro	Thr
				245					250					255	
Pro	Ser	Pro	Ser	Cys	Cys	His	Pro	Arg	Leu	Ser	Leu	His	Arg	Pro	Ala
			260					265					270		
Leu	Glu	Asp	Leu	Leu	Leu	Gly	Ser	Glu	Ala	Asn	Leu	Thr	Cys	Thr	Leu
		275					280					285			
Thr	Gly	Leu	Arg	Asp	Ala	Ser	Gly	Val	Thr	Phe	Thr	Trp	Thr	Pro	Ser
	290					295					300				
Ser	Gly	Lys	Ser	Ala	Val	Gln	Gly	Pro	Pro	Glu	Arg	Asp	Leu	Cys	Gly
305					310					315					320
Cys	Tyr	Ser	Val	Ser	Ser	Val	Leu	Pro	Gly	Cys	Ala	Glu	Pro	Trp	Asn

His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr Pro Glu Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr

<210> 3671

<211> 475

<212> PRT

<213> Homo sapiens

<400> 3671

Met	Glu	Phe	Gly	Leu	Ser	Trp	Val	Phe	Leu	Val	Ala	Leu	Phe	Arg	Gly
1				5					10					15	
Val	Gln	Cys	Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Gly	Gly	Val	Val	Gln
			20					25					30		
Pro	Gly	Arg	Ser	Leu	Thr	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Met	Phe
		35					40					45			
Ser	Gly	Tyr	Ala	Phe	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Leu	Gly	Leu
	50					55					60				
Glu	Trp	Val	Ala	Val	Val	Ser	Lys	Asp	Gly	Gly	Lys	Lys	Glu	Tyr	Ala
65					70					75					80
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Leu	Ser	Arg	Tyr	Ile	Thr	Asn	Asn
				85					90					95	
Thr	Val	Ser	Leu	Gln	Met	Asp	Ser	Leu	Arg	Leu	Asp	Asp	Thr	Ala	Val
			100					105					110		
Tyr	Tyr	Cys	Ala	Arg	Ala	Pro	Gln	Glu	Tyr	Glu	Phe	Gly	Arg	Gly	Tyr
		115					120					125			
His	Ser	Asn	Arg	Asn	Gly	Leu	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr	Val
	130					135					140				
Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala
145					150					155					160
Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu	Gly	Cys	Leu
				165					170					175	
Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly
			180					185					190		
Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser
		195					200					205			
Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu
	210					215					220				
G1v	Thr	1 770	Thr	Tyr	Thr	Cvs	Asn	Val	Asn	His	Lvs	Pro	Ser	Asn	Thr

Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr

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Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys 465 470 475

<210> 3672

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3672

Met Ser His Ser Arg Gly Arg Gly Thr Gly Ile Phe Val His Gln Phe

1 5 10 15

Pro Ser Ala Thr Ser Cys Cys Cys Ser Cys Ala Leu Ile Pro Gln His

20 25 30

Phe Trp Leu Val Gly Lys Ala Gly Arg Lys Arg His Thr Asp Met Gly

35 40 45

Gly Trp Glu Phe Thr Leu Trp Glu Gly Gln Arg Glu Arg Arg Gln Thr

50 55 60

Leu Arg Ala Arg Ala Val His Arg Asp Pro Ser Gly Gln Gln Leu Phe

65 70 75 80

Ile Lys His Leu Leu Pro Ala Leu Gly Gln Ile Leu Glu Thr Gln Gly

85 90 95

Glu Gln Asp Pro Ser Leu Ser Leu Ser Ser Trp Leu Val Gly Arg Trp

100 105 110

Pro Leu Thr Arg Ser Ser Ala His Met Val Arg Ser Val

115 120 125

<210> 3673

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3673

Met Asp Glu Leu His Lys Leu Val Asp Glu Gly Ser Gln Met Ala Gly

1 5 10 15

Gly Leu Pro Val Ile Gln Gln Gln Ala Asp Glu Gly Gln Lys Ala Val

20 25 30

Pro Gln Arg Pro Leu Val Leu Ala Ala Glu His Val Arg Leu Gln Gln

35 40 45

Leu Gln Gln Ala Gln His Val Gln Glu Ala Ala Gln Val Val Leu Leu

50 55 60

Pro Glu Leu Leu Glu Val Glu Val Gly Ala Ala Val Gln Glu Arg Arg

65 70 75 80

Asp His Gly Gln Val Pro Glu Gln Gln Arg Val Arg His Arg Gln

85 90 95

Leu Pro Ala Gly His Ala Gly Ile Arg Pro Ser Val Leu Gln Arg Pro

100 105 110

Gly Val Ala Gly Val Arg Lys Glu Arg Asp Glu Ala Val Asp Glu Ser

115 120 125

Val Gln Leu Ala Asp Ala Ala Ala Gly Ser Pro Phe Ala Val Gln

130 135 140

<210> 3674

<211> 205

<212> PRT

<213> Homo sapiens

<400> 3674 Met Ala Gln Leu Met Glu Val Leu Ser Val Thr Pro Thr Gln Ser Pro Glu Asn Asn Asp Leu Ile Ser Tyr Asn Ser Val Trp Val Ala Cys Gln Gln Met Pro Gln Ile Pro Arg Asp Asn Lys Ala Ala Ala Leu Leu Met Leu Thr Lys Asn Val Asp Phe Val Lys Asp Ala His Glu Glu Met Glu Gln Ala Val Glu Glu Cys Asp Pro Tyr Ser Gly Leu Leu Asn Asp Thr $\cdot 70$ Glu Glu Asn Asn Ser Asp Asn His Asn His Glu Asp Asp Val Leu Gly Phe Pro Ser Asn Gln Asp Leu Tyr Trp Ser Glu Asp Asp Gln Glu Leu Ile Ile Pro Cys Leu Ala Leu Val Arg Ala Ser Lys Ala Cys Leu Lys Lys Ile Arg Met Leu Val Ala Glu Asn Gly Arg Lys Asp Gln Val Ala Gln Leu Asp Asp Ile Val Asp Ile Ser Asp Glu Ile Ser Pro Ser Val Asp Asp Leu Ala Leu Ser Ile Tyr Pro Pro Met Cys His Leu Thr Val Arg Ile Asn Val Ser Thr Gly Phe Glu Gly Ile Ala Thr Glu Gln Met

Gly Arg Ile Ser Leu Ile Thr Ser Ile Ser Cys Lys Leu

<210> 3675

<211> 489

<212> PRT

<213> Homo sapiens

<400> 3675

Met Ser Arg Val Pro Gly Gly Tyr Leu Ala Leu Thr Glu Cys Phe Glu

1 5 10 15

Ile Met Thr Val Asp Phe Asn Asn Leu Gln Glu Leu Lys Ser Leu Ala 20 25 30

Thr Lys Lys Pro Asp Lys Ile Gly Ile Pro Val Ile Lys Glu Gly Ile
35 40 45

Leu Asp Ala Ile Met Val Trp Phe Val Leu Gln Leu Asp Asp Glu His
50 55 60

Ser Leu Ser Thr Ser Pro Ser Glu Glu Thr Cys Trp Glu Gln Ala Val 65 70 75 80

Tyr Pro Val Gln Asp Leu Ala Asp Tyr Trp Ile Lys Pro Gly Asp His
85 90 95

Val Met Met Glu Val Ser Cys Gln Asp Cys Tyr Leu Arg Ile Gln Ser 100 105 110

Ile Ser Val Leu Gly Leu Glu Cys Glu Met Asp Val Ala Lys Ser Phe
115 120 125

Thr Gln Asn Lys Asp Leu Leu Ser Leu Gly Asn Glu Ala Glu Leu Cys 130 135 140

Ser Ala Leu Ala Asn Leu Gln Thr Ser Lys Pro Asp Ala Val Glu Gln 145 150 155 160

Thr Cys Ile Leu Glu Ser Thr Glu Ile Ala Leu Leu Asn Asn Ile Pro 165 170 175

Tyr	His	Glu	Gly	Phe	Lys	Met	Ala	Met	Ser	Lys	Val	Leu	Ser	Ser	Leu
			180					185					190		
Thr	Pro	Glu	Lys	Leu	Tyr	Gln	Thr	Met	Asp	Thr	His	Cys	Gln	Asn	Glu
		195					200					205			
Met	Ser	Ser	Gly	Thr	Gly	Gln	Ser	Asn	Thr	Val	Gln	Asn	Ile	Leu	Glu
	210					215					220				
Pro	Phe	Tyr	Val	Leu	Asp	Val	Ser	Glu	Gly	Phe	Ser	Val	Leu	Pro	Val
225					230					235					240
Ile	Ala	Gly	Thr	Leu	Gly	Gln	Val	Lys	Pro	Tyr	Ser	Ser	Val	Glu	Lys
				245					250					255	
Asp	Gln	His	Arg	Ile	Ala	Leu	Asp	Leu	Ile	Ser	Glu	Ala	Asn	His	Phe
			260					265					270		
Pro	Lys	Glu	Thr	Leu	Glu	Phe	Trp	Leu	Arg	His	Val	Glu	Asp	Glu	Ser
		275					280					285			
Ala	Met	Leu	Gln	Arg	Pro	Lys	Ser	Asp	Lys	Leu	Trp	Ser	Ile	Ile	Ile
	290					295					300				
Leu	Asp	Val	Ile	Glu	Pro	Ser	Gly	Leu	Ile	Gln	Gln	Glu	Ile	Met	Glu
305					310					315					320
Lys	Ala	Ala	Ile	Ser	Arg	Cys	Leu	Leu	Gln	Ser	Gly	Gly	Lys	Ile	Phe
				325					330					335	
Pro	Gln	Tyr	Val	Leu	Met	Phe	Gly	Leu	Leu	Val	Glu	Ser	Gln	Thr	Leu
			340					345					350		
Leu	Glu	Glu	Asn	Ala	Val	Gln	Gly	Thr	Glu	Arg	Thr	Leu	Gly	Leu	Asn
		355					360					365			
Ile	Ala	Pro	Phe	Ile	Asn	Gln	Phe	Gln	Val	Pro	Ile	Arg	Val	Phe	Leu
	370					375					380				
Asp	Leu	Ser	Ser	Leu	Pro	Cys	Ile	Pro	Leu	Ser	Lys	Pro	Val	Glu	Leu
385					390					395					400
Leu	Arg	Leu	Asp	Leu	Met	Thr	Pro	Tyr	Leu	Asn	Thr	Ser	Asn	Arg	Glu

Val Lys Val Tyr Val Cys Lys Ser Gly Arg Leu Thr Ala Ile Pro Phe Trp Tyr His Met Tyr Leu Asp Glu Glu Ile Arg Leu Asp Thr Ser Ser Glu Ala Ser His Trp Lys Gln Ala Ala Val Val Leu Asp Asn Pro Ile Gln Val Glu Met Gly Glu Glu Leu Val Leu Ser Ile Gln His His Lys Ser Asn Val Ser Ile Thr Val Lys Gln

<210> 3676

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3676

Met Ser Thr Gly Leu Arg Leu Ala Glu Ser Arg Val Glu Pro Ala Leu Glu Lys Gln Ala Leu Leu Gln Ala Gln Leu Glu Glu Gln Leu Arg Asp Lys Val Leu His Glu Lys Asp Leu Ser Gln Gln Gln Met Gln Ser Asp Leu Asp Lys Ala Asp Leu Ser Ala Arg Arg Val Pro Gly Clys Cys Thr Arg Gln Ala Ser Leu Gln Lys Ser Asp Arg Ala Gly Pro Gly Ser

Glu Ala Ser Ser Glu Ala Glu Ser Gly Glu Gly Ser Gly Arg Gln Gly
85 90 95

Pro His Arg Glu Ala

100

<210> 3677

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3677

Met Leu Pro Pro Gly Asp Thr Thr Met Ile Pro Leu Ser Trp Lys Leu

1 5 10 15

Arg Leu Pro Pro Gly His Phe Arg Leu His Leu Pro Leu Ser Gln Gln
20 25 30

Val Lys Lys Gly Val Thr Val Leu Ala Gly Leu Ile Glu Pro Tyr Tyr 35 40 45

Gln Asp Asp Ile Ser Leu Leu Leu Asn Asn Glu Gly Lys Glu Glu Tyr
50 55 60

Glu Trp Asn Thr Gly Asp Pro Leu Gly Cys Leu Leu Val Leu Pro Cys
65 70 75 80

Pro Met Ile Lys Val Asn Gly Lys Leu Gln Gln Pro Asn Ser Gly Arg
85 90 95

Asn Thr Asn Ser Pro Asp Pro Ser
100

<210> 3678

<211> 673

<212> PRT

<213> Homo sapiens

<400> 3678

Met Ala Trp Leu Ser Gln Arg Gln Leu Ala Arg Ser Cys Leu Asp Leu

1 5 10 15

Asn Thr Ile Ser Gln Ser Pro Gly Trp Ala Gln Thr Gln Leu Ala Glu
20 25 30

Val Thr Ile Ala Cys Lys Val Asn His Gln Gly Gly Ser Val Gln Leu
35 40 45

Pro Glu Ser Asp Ile Thr Val His Val Pro Gln Gly His Val Ala Val
50 55 60

Gly Glu Phe Gln Glu Val Ser Leu Arg Ala Phe Leu Asp Pro Pro His
65 70 75 80

Met Leu Asn His Asp Leu Ser Cys Thr Val Ser Pro Leu Leu Glu Ile 85 90 95

Met Leu Gly Asn Leu Asn Thr Met Glu Ala Leu Leu Glu Met Lys
100 105 110

Ile Gly Ala Glu Val Arg Lys Asp Pro Phe Ser Gln Val Met Thr Glu
115 120 125

Met Val Cys Leu His Ser Leu Gly Lys Glu Gly Pro Phe Lys Val Leu 130 135 140

Ser Asn Cys Tyr Ile Tyr Lys Asp Thr Ile Gln Val Lys Leu Ile Asp 145 150 155 160

Leu Ser Gln Val Met Tyr Leu Val Val Ala Ala Gln Ala Lys Ala Leu 165 170 175

Pro Ser Pro Ala Ala Thr Ile Trp Asp Tyr Ile His Lys Thr Thr Ser 180 185 190

Ile	Gly	Ile	Tyr	Gly	Pro	Lys	Tyr	Ile	His	Pro	Ser	Phe	Thr	Val	Val
		195					200					205			
Leu	Thr	Val	Cys	Gly	His	Asn	Tyr	Met	Pro	Gly	Gln	Leu	Thr	Ile	Ser
	210					215					220	•			
Asp	Ile	Lys	Lys	Gly	Gly	Lys	Asn	Ile	Ser	Pro	Val	Val	Phe	Gln	Leu
225					230					235					240
Trp	Gly	Lys	Gln	Ser	Phe	Leu	Leu	Asp	Lys	Pro	Gln	Asp	Leu	Ser	Ile
				245					250					255	
Ser	Ile	Phe	Ser	Cys	Asp	Pro	Asp	Phe	Glu	Val	Lys	Thr	Glu	Gly	Glu
			260					265					270		
Arg	Lys	Glu	Ile	Lys	Gln	Lys	Gln	Leu	Glu	Ala	Gly	Glu	Val	Val	His
		275					280					285			
Gln	Gln	Phe	Leu	Phe	Ser	Leu	Val	Glu	His	Arg	Glu	Met	His	Leu	Phe
	290					295					300				
Asp	Phe	Cys	Val	Gln	Val	Glu	Pro	Pro	Asn	Gly	Glu	Pro	Val	Ala	Gln
305					310					315					320
Phe	Ser	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Pro	Asn	Leu	Lys	Arg	Leu	Ser
				325					330					335	
Asn	Leu	Pro	Gly	Tyr	Leu	Gln	Lys	Lys	Glu	Glu	Ile	Lys	Ser	Ala	Pro
			340					345					350		
Leu	Ser	Pro	Lys	Ile	Leu	Val		Tyr	Pro	Thr	Phe		Asp	Lys	Thr
		355					360					365			
Leu		Phe	Ser	Asn	Tyr		Val	Thr	Leu	Lys		Val	Leu	Arg	Gln
	370					375				_	380				
	Lys	Ile	Asp	Tyr	Phe	Leu	Glu	Tyr	Phe		Gly	Asp	Thr	Ile	
385			_		390					395		~	_		400
Leu	Leu	Gly	Glu		Lys	Val	Lys	Ala		Gly	Gln	Ser	Lys		Lys
				405		_			410		. .			415	
Glu	Trp	Tyr	Val	Gly	Val	Leu	Arg	Gly	Lys	Ile	Gly	Leu	Val	His	Cys

			420					425					430		
Lys	Asn	Val	Lys	Val	Ile	Ser	Lys	Glu	Gln	Val	Met	Phe	Met	Ser	Asp
		435					440					445			
Ser	Val	Phe	Thr	Thr	Arg	Asn	Leu	Leu	Glu	Gln	Ile	Val	Leu	Pro	Leu
	450					455					460				
Lys	Lys	Leu	Thr	Tyr	Ile	Tyr	Ser	Val	Val	Leu	Thr	Leu	Val	Ser	Glu
465					470					475					480
Lys	Val	Tyr	Asp	Trp	Lys	Val	Leu	Ala	Asp	Val	Leu	Gly	Tyr	Ser	His
				485					490					495	
Leu	Ser	Leu	Glu	Asp	Phe	Asp	Gln	Ile	Gln	Ala	Asp	Lys	Glu	Ser	Glu
			500					505					510		
Lys	Val	Ser	Tyr	Val	Ile	Lys	Lys	Leu	Lys	Glu	Asp	Cys	His	Thr	Glu
		515					520					525			•
Arg	Asn	Thr	Arg	Lys	Phe	Leu	Tyr	Glu	Leu	Ile	Val	Ala	Leu	Leu	Lys
	530					535					540				
Met	Asp	Cys	Gln	Glu	Leu	Val	Ala	Arg	Leu	Ile	Gln	Glu	Ala	Ala	Val
545					550					555					560
Leu	Thr	Ser	Ala	Val	Lys	Leu	Gly	Lys	Gly	Trp	Arg	Glu	Leu	Ala	Glu
				565					570					575	
Lys	Leu	Val	Arg	Leu	Thr	Lys	Gln	Gln	Met	Glu	Ala	Tyr	Glu	Ile	Pro
			580					585					590		
His	Arg	Gly	Asn	Thr	Gly	Asp	Val	Ala	Val	Glu	Met	Met	Trp	Lys	Pro
		595					600					605			
Ala	Tyr	Asp	Phe	Leu	Tyr	Thr	Trp	Ser	Ala	His	Tyr	Gly	Asn	Asn	Tyr
	610					615					620				
Arg	Asp	Val	Leu	Gln	Asp	Leu	Gln	Ser	Ala	Leu	Asp	Arg	Met	Lys	Asn
625					630					635					640
Pro	Val	Thr	Lys	His	Trp	Arg	Glu	Leu	Thr	Gly	Val	Leu	Ile	Leu	Val
				645					650					655	

Asn Ser Leu Glu Val Leu Arg Val Thr Ala Phe Ser Thr Ser Glu Glu
660 665 670

Val

<210> 3679

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3679

Met Thr Gln Asn Ser Ser Ser Leu Gly Asp Arg Ile Ile Thr Pro Tyr

1 5 10 15

Thr Pro Pro Arg Ser Gln Pro Met Asn Lys His Leu Phe Val Ser Leu
20 25 30

Phe Thr Leu Phe Gln Thr Thr Glu Leu Asp Phe Ala Asn Lys Lys Ser

35 40 45

Cys Phe Leu Cys Leu Pro Leu Arg Ala Asp Gly Phe Pro Glu Met Pro 50 55 60

His Ser Pro Ala Gln Thr Glu Arg Met Gln Lys Leu Ala Lys Asp Pro
65 70 75 80

Pro His Ala Arg Ser Glu Asp Val Pro Asp His Leu Phe Phe Val Asp 85 90 95

Thr Ala Gly Leu Arg Glu Ile Val Cys Phe Cys Gly Val Leu Ser Leu
100 105 110

Arg Thr Ser Glu Gly Leu Met Arg Lys Glu Thr Ala 115 120 <210> 3680

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3680

Met Asn Lys Cys Lys Glu Ile Asn Glu Glu Glu Ala Gly Val Arg Arg

1 5 10 15

Gly Val Phe Tyr Met Ser Arg Tyr His Ala Lys Val Leu Leu Gly Ala 20 25 30

Ile Ala Ser Ala Gly Gln Pro Ala Ser Pro Leu Arg Glu Val Ser Leu
35 40 45

Thr His Cys Pro Leu Leu Gly Pro Ser Arg Ser His Ile Gln Gly
50 55 60

Leu Gly His Tyr Leu Ile Asn Glu Trp Val Val Arg Met Ser Lys Gln 65 70 75 80

Gly Leu Thr Gln Arg Ser Gly Val Thr Gln Pro Gln Lys Leu Arg Val 85 90 95

Ser Ile Gly Ile Glu Gly Pro Arg Asn Val Phe Phe Val Asp Val Ser 100 105 110

Leu Leu Gln Arg Thr Thr Pro Ala Ser Arg Pro Arg Asn Val Gly Lys
115 120 125

Gly Lys Ala Trp Leu Val Leu Val Glu Met Glu Met Leu Val Thr Val
130 135 140

Glu Glu Cys Pro Pro Ser Asp Ser Gln Trp Gly Gly Ala Leu Gly Pro 145 150 155 160

Cys His Cys Pro Arg Thr Ser Gly Lys Ser Ala Arg Gly Pro Gln Pro 165 170 175 Phe Pro Ala Arg Arg Pro Gly Arg Arg Leu Val Leu Thr Ser Met Arg

180

185

190

Phe Leu Asp Gly Thr Ala Ser Leu Leu Ser Lys Pro Phe Leu

195

200

205

<210> 3681

<211> 709

<212> PRT

<213> Homo sapiens

<400> 3681

Met Ile Ala Ser Lys Gln Arg Gln Phe Thr Glu Val Phe Arg Ile Met

1 5 10 15

Ser Ser Thr Phe Ser Gln Ser Arg Phe Leu Tyr Ala Ala Val Val Thr
20 25 30

Asp Ser Pro Glu Asn Asp Ile Pro Met Glu Ile Thr Thr Ala Glu Pro
35 40 45

Gln Val Ser Glu Ala Val Tyr Asp Cys Val Ile Cys Gly Gln Ser Gly
50 55 60

Pro Ser Ser Glu Asp Arg Pro Thr Gly Leu Val Val Leu Leu Gln Ala
65 70 75 80

Ser Ser Val Leu Gly Gln Cys Arg Asp Asn Val Glu Pro Lys Lys Leu 85 90 95

Pro Ile Ser Glu Glu Glu Gln Ile Tyr Pro Trp Asp Thr Cys Ala Ala 100 105 110

Val His Asp Val Arg Leu Ser Leu Leu Gln Arg Tyr Phe Lys Asp Ser 115 120 125

Ser Cys Leu Leu Ala Val Ser Ile Gly Trp Glu Gly Gly Val Tyr Val

	130					135					140				
Gln	Thr	Cys	Gly	His	Thr	Leu	His	Ile	Asp	Cys	His	Lys	Ser	Tyr	Met
145					150					155					160
Glu	Ser	Leu	Arg	Asn	Asp	Gln	Val	Leu	Gln	Gly	Phe	Ser	Val	Asp	Lys
				165					170					175	
Gly	Glu	Phe	Thr	Cys	Pro	Leu	Cys	Arg	Gln	Phe	Ala	Asn	Ser	Val	Leu
			180					185					190		
Pro	Cys	Tyr	Pro	Gly	Ser	Asn	Val	Glu	Asn	Asn	Pro	Trp	Gln	Arg	Pro
		195					200					205			
Ser	Asn	Lys	Ser	Ile	Gln	Asp	Leu	Ile	Lys	Glu	Val	Glu	Glu	Leu	Gln
	210					215					220				
Gly	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	Thr	Asn	Leu	Ser	Lys	Glu	Met
225			•		230					235					240
Glu	Ser	Val	Met	Lys	Asp	Ile	Lys	Asn	Thr	Thr	Gln	Lys	Lys	Tyr	Arg
				245					250					255	
Asp	Tyr	Ser	Lys	Thr	Pro	Gly	Ser	Pro	Asp	Asn	Asp	Phe	Leu	Phe	Met
			260					265					270		
Tyr	Ser	Val	Ala	Arg	Thr	Asn	Leu	Glu	Leu	Glu	Leu	Ile	His	Arg	Gly
		275					280					285			
Gly	Asn	Leu	Cys	Ser	Gly	Gly	Ala	Ser	Thr	Ala	Gly	Lys	Arg	Ser	Cys
	290					295					300				
Leu	Asn	Gln	Leu	Phe	His	Val	Leu	Ala	Leu	His	Met	Arg	Leu	Tyr	Ser
305					310					315					320
Ile	Asp	Ser	Glu	Tyr	Asn	Pro	Trp	Arg	Lys	Leu	Thr	Gln	Leu	Glu	Glu
				325					330					335	
Met	Asn	Pro	Gln	Leu	Gly	Tyr	Glu	Glu	Gln	Gln	Pro	Glu	Val	Pro	Ile
			340					345					350		
Leu	Tyr	His	Asp	Val	Thr	Ser	Leu	Leu	Leu	Ile	Gln	Ile	Leu	Met	Met
		355					360					365			

Pro	Gln	Pro	Leu	Arg	Lys	Asp	His	Phe	Thr	Cys	Ile	Val	Lys	Val	Leu
	370					375					380				
Phe	Thr	Leu	Leu	Tyr	Thr	Gln	Ala	Leu	Ala	Ala	Leu	Ser	Val	Lys	Cys
385					390					395					400
Ser	Glu	Glu	Asp	Arg	Ser	Ala	Trp	Lys	His	Ala	Gly	Ala	Leu	Lys	Lys
				405					410					415	
Ser	Thr	Cys	Asp	Ala	Glu	Lys	Ser	Tyr	Glu	Val	Leu	Leu	Ser	Phe	Val
			420					425					430		
Ile	Ser	Glu	Leu	Phe	Lys	Gly	Lys	Leu	Tyr	His	Glu	Glu	Gly	Thr	Gln
		435					440					445			
Glu	Cys	Ala	Met	Val	Asn	Pro	Ile	Ala	Trp	Ser	Pro	Glu	Ser	Met	Glu
	450					455					460				
Lys	Cys	Leu	Gln	Asp	Phe	Cys	Leu	Pro	Phe	Leu	Arg	Ile	Thr	Ser	Leu
465					470					475					480
Leu	Gln	His	His	Leu	Phe	Gly	Glu	Asp	Leu	Pro	Ser	Cys	Gln	Glu	Glu
				485					490					495	
Glu	Glu	Phe	Ser	Val	Leu	Ala	Ser	Cys	Leu	Gly	Leu	Leu	Pro	Thr	Phe
			500					505					510		
Tyr	Gln	Thr	Glu	His	Pro	Phe	Ile	Ser	Ala	Ser	Cys	Leu	Asp	Trp	Pro
		515					520					525			
Val	Pro	Ala	Phe	Asp	Ile	Ile	Thr	Gln	Trp	Cys	Phe	Glu	Ile	Lys	Ser
	530					535					540				
Phe	Thr	Glu	Arg	His	Ala	Glu	Gln	Gly	Lys	Ala	Leu	Leu	Ile	Gln	Glu
545					550					555					560
Ser	Lys	Trp	Lys	Leu	Pro	His	Leu	Leu	Gln	Leu	Pro	Glu	Asn	Tyr	Asn
				565					570					575	
Thr	Ile	Phe	Gln	Tyr	Tyr	His	Arg	Lys	Thr	Cys	Ser	Val	Cys	Thr	Lys
			580					585					590		
Val	Pro	Lys	Asp	Pro	Ala	Val	Cys	Leu	Val	Cys	Gly	Thr	Phe	Val	Cys

Leu Lys Gly Leu Cys Cys Lys Gln Gln Ser Tyr Cys Glu Cys Val Leu His Ser Gln Asn Cys Gly Ala Gly Thr Gly Ile Phe Leu Leu Ile Asn Ala Ser Val Ile Ile Ile Arg Gly His Arg Phe Cys Leu Trp Gly Ser Val Tyr Leu Asp Ala His Gly Glu Glu Asp Arg Asp Leu Arg Arg Gly Lys Pro Leu Tyr Ile Cys Lys Glu Arg Tyr Lys Val Leu Glu Gln Gln Trp Ile Ser His Thr Phe Asp His Ile Asn Lys Arg Trp Gly Pro His Tyr Asn Gly Leu <210> 3682 <211> 194 <212> PRT <213> Homo sapiens <400> 3682 Met Gly Lys Leu Arg Pro Ser Arg Gly Arg Gly Phe Ala Asp Val Ser

Gln Gln Ile Arg Val Arg Asn Arg Pro Ser Trp Ala Cys Arg Arg Gly

Gly Pro Leu Gly Thr Leu Leu Ala Asn Ala Gly Pro Ser Thr Val Pro

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Val Thr Pro Thr Ala Gly Ser Cys Gln Pro Ser Pro Leu Ser Pro Gly Gly Ser Asp Pro Pro Pro Pro Pro Arg Ala His Val Ser Pro Gln Glu Ala Pro Leu Gly Gln Val Pro Gly Ala Glu Trp Leu Pro Pro Thr Arg Gly Leu Leu Cys Lys Asp Val Ser Ser Ser Pro Gly Pro Ser Phe His Leu Gly Gly Pro Gly Leu Pro Gly His Ala Gly Pro Cys Gly Pro Arg Ala Arg Pro Ala Gln Gly Leu Ala Gly Arg Gly Gly Asn Val Gly Glu Gly Ser Glu Ser Pro Leu Gly Thr Leu Pro Cys Ser Val Pro Ala Ser Gln Gln Leu Leu Arg Gly Arg Ser His Leu Gln Gly Ser Leu Ala Ala Leu Gly Glu Ala Arg Gly Gly Gly Ala Ala Phe Ser Trp Gly Gln Glu Gly Pro

<210> 3683

<211> 1053

<212> PRT

<213> Homo sapiens

<400> 3683

Met Lys Leu Gly Asn Lys Ser Glu Leu Asn Met Glu Ser Asn Ser Asp

1				5					10					15	
Ala	Gln	Asp	Leu	Val	Asn	Ser	Gln	Lys	Ala	Met	Cys	Asn	Glu	Thr	Thr
			20					25					30		
Ser	Phe	Glu	Lys	Met	Ala	Pro	Ser	Phe	Asp	Lys	Asp	Ser	Asn	Leu	Ser
		35					40					45			
Ser	Asp	Ser	Thr	Thr	Val	Asp	Gly	Ser	Ser	Met	Ser	Leu	Ala	Val	Asp
	50					55					60				
Glu	Gly	Thr	Gly	Phe	Ile	Arg	Cys	Thr	Val	Ser	Met	Ser	Leu	Pro	Lys
65					70					75					80
Gln	Leu	Lys	Leu	Thr	Cys	Asn	Glu	His	Leu	Gln	Ser	Gly	Arg	Asn	Leu
				85					90					95	
Gly	Val	Ser	Ala	Pro	Gln	Met	Gln	Lys	Glu	Ser	Val	Ile	Lys	Glu	Glu
			100					105					110		
Asn	Ser	Leu	Arg	Ile	Val	Pro	Lys	Lys	Pro	Gln	Arg	His	Ser	Leu	Pro
		115					120					125			
Ala	Thr	Gly	Val	Leu	Lys	Lys	Ala	Ala	Ser	Glu	Glu	Leu	Leu	Glu	Lys
	130					135					140				
Ser	Ser	Tyr	Pro	Ser	Ser	Glu	Glu	Lys	Ser	Ser	Glu	Lys	Ser	Leu	Glu
145					150					155					160
Arg	Asn	His	Leu	Gln	His	Leu	Cys	Ala	Gln	Asn	Arg	Gly	Val	Ser	Ser
				165					170					175	
Ser	Phe	Asp	Met	Pro	Lys	Arg	Ala	Ser	Glu	Lys	Pro	Val	Trp	Lys	Leu
			180					185					190		
Pro	His	Pro	Ile	Leu	Pro	Phe	Ser	Gly	Asn	Pro	Glu	Phe	Leu	Lys	Ser
		195					200					205			
Val	Thr	Val	Ser	Ser	Asn	Ser	Glu	Pro	Ser	Thr	Ala	Leu	Thr	Lys	Pro
	210					215					220				
Arg	Ala	Lys	Ser	Leu	Ser	Ala	Met	Asp	Val	Glu	Lys	Cys	Thr	Lys	Pro
225					230					235					240

Cys	Lys	Asp	Ser		Lys	Lys	Asn	Ser		Lys	Lys	Leu	Leu		Met
				245					250					255	
Lys	Leu	Ser	Ile	Cys	Phe	Met	Lys	Ser	Asp	Phe	Gln	Lys	Phe	Trp	Ser
			260					265					270		
Lys	Ser	Ser	Gln	Leu	Gly	Asp	Thr	Thr	Thr	Gly	His	Leu	Ser	Ser	Gly
		275					280					285			
Glu	Gln	Lys	Gly	Ile	Glu	Ser	Asp	Trp	Gln	Gly	Leu	Leu	Val	Gly	Glu
	290					295					300				
Glu	Lys	Arg	Ser	Lys	Pro	Ile	Lys	Ala	Tyr	Ser	Thr	Glu	Asn	Tyr	Ser
305					310					315					320
Leu	Glu	Ser	Gln	Lys	Lys	Arg	Lys	Lys	Ser	Arg	Gly	Gln	Thr	Ser	Ala
				325					330					335	
Ala	Asn	Gly	Leu	Arg	Ala	Glu	Ser	Leu	Asp	Asp	Gln	Met	Leu	Ser	Arg
			340					345					350		•
Glu	Ser	Ser	Ser	Gln	Ala	Pro	Tyr	Lys	Ser	Val	Thr	Ser	Leu	Cys	Ala
		355					360					365			
Pro	Glu	Tyr	Glu	Asn	Ile	Arg	His	Tyr	Glu	Glu	Ile	Pro	Glu	Tyr	Glu
	370					375					380				
Asn	Leu	Pro	Phe	Ile	Met	Ala	Ile	Arg	Lys	Thr	Gln	Glu	Leu	Glu	Trp
385					390					395					400
Gln	Asn	Ser	Ser	Ser	Met	Glu	Asp	Ala	Asp	Ala	Asn	Val	Tyr	Glu	Val
				405					410					415	
Glu	Glu	Pro	Tyr	Glu	Ala	Pro	Asp	Gly	Gln	Leu	Gln	Leu	Gly	Pro	Arg
			420					425					430		
His	Gln	His	Ser	Ser	Ser	Gly	Ala	Ser	Gln	Glu	Glu	Gln	Asn	Asp	Leu
		435					440					445			
Gly	Leu	Gly	Asp	Leu	Pro	Ser	Asp	Glu	Glu	Glu	Ile	Ile	Asn	Ser	Ser
	450					455					460				
Asp	Glu	Asp	Asp	Val	Ser	Ser	Glu	Ser	Ser	Lvs	Glv	Glu	Pro	Asp	Pro

Leu Glu Asp Lys Gln Asp Glu Asp Asn Gly Met Lys Ser Lys Val His His Ile Ala Lys Glu Ile Met Ser Ser Glu Lys Val Phe Val Asp Val Leu Lys Leu Leu His Ile Asp Phe Arg Asp Ala Val Ala His Ala Ser Arg Gln Leu Gly Lys Pro Val Ile Glu Asp Arg Ile Leu Asn Gln Ile Leu Tyr Tyr Leu Pro Gln Leu Tyr Glu Leu Asn Arg Asp Leu Leu Lys Glu Leu Glu Glu Arg Met Leu His Trp Thr Glu Gln Gln Arg Ile Ala Asp Ile Phe Val Lys Lys Gly Pro Tyr Leu Lys Met Tyr Ser Thr Tyr Ile Lys Glu Phe Asp Lys Asn Ile Ala Leu Leu Asp Glu Gln Cys Lys Lys Asn Pro Gly Phe Ala Ala Val Val Arg Glu Phe Glu Met Ser Pro Arg Cys Ala Asn Leu Ala Leu Lys His Tyr Leu Leu Lys Pro Val Gln Arg Ile Pro Gln Tyr Arg Leu Leu Leu Thr Asp Tyr Leu Lys Asn Leu Ile Glu Asp Ala Gly Asp Tyr Arg Asp Thr Gln Asp Ala Leu Ala Val Val Ile Glu Val Ala Asn His Ala Asn Asp Thr Met Lys Gln Gly Asp Asn Phe Gln Lys Leu Met Gln Ile Gln Tyr Ser Leu Asn Gly His His

Glu	Ile	Val	Gln	Pro	Gly	Arg	Val	Phe	Leu	Lys	Glu	Gly	Ile	Leu	Met
705					710					715					720
Lys	Leu	Ser	Arg	Lys	Val	Met	Gln	Pro	Arg	Met	Phe	Phe	Leu	Phe	Asn
				725					730					735	
Asp	Ala	Leu	Leu	Tyr	Thr	Thr	Pro	Val	Gln	Ser	Gly	Met	Tyr	Lys	Leu
			740					745					750		
Asn	Asn	Met	Leu	Ser	Leu	Ala	Gly	Met	Lys	Val	Arg	Lys	Pro	Thr	Gln
		755					760					765			
Glu	Ala	Tyr	Gln	Asn	Glu	Leu	Lys	Ile	Glu	Ser	Val	Glu	Arg	Ser	Phe
	770					775					780				
Ile	Leu	Ser	Ala	Ser	Ser	Ala	Thr	Glu	Arg	Asp	Glu	Trp	Leu	Glu	Ala
785					790					795					800
Ile	Ser	Arg	Ala	Ile	Glu	Glu	Tyr	Ala	Lys	Lys	Arg	Ile	Thr	Phe	Cys
				805					810					815	
Pro	Ser	Arg	Ser	Leu	Asp	Glu	Ala	Asp	Ser	Glu	Asn	Lys	Glu	Glu	Val
			820					825					830		
Ser	Pro	Leu	Gly	Ser	Lys	Ala	Pro	Ile	Trp	Ile	Pro	Asp	Thr	Arg	Ala
		835					840					845			
Thr	Met	Cys	Met	Ile	Cys	Thr	Ser	Glu	Phe	Thr	Leu	Thr	Trp	Arg	Arg
	850					855					860				
His	His	Cys	Arg	Ala	Cys	Gly	Lys	Ile	Val	Cys	Gln	Ala	Cys	Ser	Ser
865					870					875					880
Asn	Lys	Tyr	Gly	Leu	Asp	Tyr	Leu	Lys	Asn	Gln	Pro	Ala	Arg	Val	Cys
				885					890					895	
Glu	His	Cys	Phe	Gln	Glu	Leu	Gln	Lys	Leu	Asp	His	Gln	His	Ser	Pro
			900					905					910		
Arg	Ile	Gly	Ser	Pro	Gly	Asn	His	Lys	Ser	Pro	Ser	Ser	Ala	Leu	Ser
		915					920					925			
Ser	Val	Leu	His	Ser	Tle	Pro	Ser	Glv	Arg	Lvs	Gln	Lvs	Lvs	He	Pro

930 935 940

Ala Ala Leu Lys Glu Val Ser Ala Asn Thr Glu Asp Ser Ser Met Ser

945 950 955 960

Gly Tyr Leu Tyr Arg Ser Lys Gly Asn Lys Lys Pro Trp Lys His Phe

965 970 975

Trp Phe Val Ile Lys Asn Lys Val Leu Tyr Thr Tyr Ala Ala Ser Glu
980 985 990

Asp Val Ala Ala Leu Glu Ser Gln Pro Leu Leu Gly Phe Thr Val Ile 995 1000 1005

Gln Val Lys Asp Glu Asn Ser Glu Ser Lys Val Phe Gln Leu Leu His 1010 1015 1020

Lys Asn Met Leu Phe Tyr Val Phe Lys Ala Glu Asp Ala His Ser Ala 1025 1030 1035 1040

Gln Lys Trp Ile Glu Ala Phe Gln Glu Gly Thr Ile Leu 1045 1050

<210> 3684

<211> 545

<212> PRT

<213> Homo sapiens

<400> 3684

1

Met Gln Asn Lys Leu Cys Phe Ser Leu Asp Pro Phe Gln Leu Pro Ala

5 10 15

Lys Thr Glu Pro Ile Lys Glu Arg Ala Val Gln Pro Ala Pro Thr Arg

20 25 30

Lys Pro Thr Val Ile Arg Ile Pro Ala Lys Pro Gly Lys Cys Leu His

35 40 45

Glu	Asp	Pro	Gln	Ser	Pro	Pro	Pro	Leu	Pro	Ala	Glu	Lys	Pro	Ile	Gly
	50					55					60				
Asn	Thr	Phe	Ser	Thr	Val	Ser	Gly	Lys	Leu	Ser	Asn	Val	Glu	Arg	Thr
65					70					75					80
Arg	Asn	Leu	Glu	Ser	Asn	His	Pro	Gly	Gln	Thr	Gly	Gly	Phe	Val	Arg
				85					90					95	
Val	Pro	Pro	Arg	Leu	Pro	Pro	Arg	Pro	Val	Asn	Gly	Lys	Thr	Ile	Pro
			100					105					110		
Thr	Gln	Gln	Pro	Pro	Thr	Lys	Val	Pro	Pro	Glu	Arg	Pro	Pro	Pro	Pro
		115					120					125			
Lys	Leu	Ser	Ala	Thr	Arg	Arg	Ser	Asn	Lys	Lys	Leu	Pro	Phe	Asn	Arg
	130					135					140				
Ser	Ser	Ser	Asp	Met	Asp	Leu	Gln	Lys	Lys	Gln	Ser	Asn	Leu	Ala	Thr
145					150					155					160
Gly	Leu	Ser	Lys	Ala	Lys	Ser	Gln	Val	Phe	Lys	Asn	Gln	Asp	Pro	Val
				.165					170					175	
Leu	Pro	Pro	Arg	Pro	Lys	Pro	Gly	His	Pro	Leu	Tyr	Ser	Lys	Tyr	Met
			180					185					190		
Arg	Gly	Asp	Val	Leu	Val	Met	Leu	Lys	Gln	Thr	Glu	Asn	Asn	Tyr	Leu
		195					200					205			
Glu	Cys	Gln	Lys	Gly	Glu	Asp	Thr	Gly	Arg	Val	His	Leu	Ser	Gln	Met
	210					215					220				
Lys	Ile	Ile	Thr	Pro	Leu	Asp	Glu	His	Leu	Arg	Ser	Arg	Pro	Asn	Asp
225					230					235					240
Pro	Ser	His	Ala	Gln	Lys	Pro	Val	Asp	Ser	Gly	Ala	Pro	His	Ala	Val
				245					250					255	
Val	Leu	His	Asp	Phe	Pro	Ala	Glu	Gln	Val	Asp	Asp	Leu	Asn	Leu	Thi
			260					265					270		
Ser	Gly	Glu	Ile	Val	Tyr	Leu	Leu	Glu	Lys	Ile	Asp	Thr	Asp	Trp	Tyr

		275					280					285			
Arg	Gly	Asn	Cys	Arg	Asn	Gln	Ile	Gly	Ile	Phe	Pro	Ala	Asn	Tyr	Val
	290					295					300				
Lys	Val	Ile	Ile	Asp	Ile	Pro	Glu	Gly	Gly	Asn	Gly	Lys	Arg	Glu	Cys
305					310					315					320
Val	Ser	Ser	His	Cys	Val	Lys	Gly	Ser	Arg	Cys	Val	Ala	Arg	Phe	Glu
				325					330					335	
Tyr	Ile	Gly	Glu	Gln	Lys	Asp	Glu	Leu	Ser	Phe	Ser	Glu	Gly	Glu	Ile
			340					345					350		
Ile	Ile	Leu	Lys	Glu	Tyr	Val	Asn	Glu	Glu	Trp	Ala	Arg	Gly	Glu	Val
		355					360					365			
Arg	Gly	Arg	Thr	Gly	Ile	Phe	Pro	Leu	Asn	Phe	Val	Glu	Pro	Val	Glu
	370					375					380				
Asp	Tyr	Pro	Thr	Ser	Gly	Ala	Asn	Val	Leu	Ser	Thr	Lys	Val	Pro	Leu
385					390					395					400
Lys	Thr	Lys	Lys	Glu	Asp	Ser	Gly	Ser	Asn	Ser	Gln	Val	Asn	Ser	Leu
				405					410					415	
Pro	Ala	Glu	Trp	Cys	Glu	Ala	Leu	His	Ser	Phe	Thr	Ala	Glu	Thr	Ser
			420					425					430		
Asp	Asp	Leu	Ser	Phe	Lys	Arg	Gly	Asp	Arg	Ile	Gln	Ile	Leu	Glu	Arg
		435					440					445			
Leu	Asp	Ser	Asp	Trp	Cys	Arg	Gly	Arg	Leu	Gln	Asp	Arg	Glu	Gly	Ile
	450					455					460				
Phe	Pro	Ala	Val	Phe	Val	Arg	Pro	Cys	Pro	Ala	Glu	Ala	Lys	Ser	Met
465					470					475					480
Leu	Ala	Ile	Val	Pro	Lys	Gly	Arg	Lys	Ala	Lys	Ala	Leu	Tyr	Asp	Phe
				485					490					495	
Arg	Gly	Glu	Asn	Glu	Asp	Glu	Leu	Ser	Phe	Lys	Ala	Gly	Asp	Ile	Ile
			500					505					510		

Thr Glu Leu Glu Ser Val Asp Asp Asp Trp Met Ser Gly Glu Leu Met 515 520 525 Gly Lys Ser Gly Ile Phe Pro Lys Asn Tyr Ile Gln Phe Leu Gln Ile 530 535 540 Ser 545 <210> 3685 <211> 646 <212> PRT <213> Homo sapiens <400> 3685 Met Asn Glu Cys Asn Val His Lys Glu Gly Tyr Asn Glu Leu Asn Gln 1 5 10 15 Tyr Leu Thr Thr Gln Ser Lys Ile Phe Gln Cys Asp Lys Tyr Val 20 25 30 Lys Val Phe His Lys Leu Leu Asn Ser Asn Arg His Asn Thr Lys His 45 35 40 Thr Gly Lys Lys Pro Phe Lys Cys Lys Lys Cys Gly Lys Ser Phe Cys 50 55 60 Met Leu Leu His Leu Cys Gln His Lys Arg Ile His Ile Arg Glu Asn 65 70 75 80 Ser Tyr Arg Cys Glu Glu Cys Gly Lys Ala Phe Ile Trp Phe Ser Thr

Leu Thr Arg His Arg Arg Val His Thr Gly Glu Lys Ser Tyr Lys Tyr

100 105 110

90

85

Glu Cys Gly Lys Ser Phe Asn Gln Asp Ser Asn Leu Thr Thr His Lys

		115					120					125			
Arg	Ile	His	Thr	Gly	Gln	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Thr
	130					135					140				
Ser	Phe	Tyr	Gln	Phe	Ser	Tyr	Leu	Thr	Arg	His	Lys	Leu	Ile	His	Thr
145					150					155					160
Arg	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Gln	Tyr	Gly	Lys	Thr	Phe	Asn	Gln
				165					170					175	
Ser	Ser	Thr	Leu	Ile	Gly	His	Lys	Ile	Ile	His	Asn	Gly	Glu	Lys	Pro
			180					185					190		
Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Leu	Ser	Ile	Phe	Ser	Thr	Pro
		195					200					205			
Thr	Lys	His	Lys	Ile	Ile	His	Thr	Glu	Glu	Lys	Ser	His	Arg	Cys	Glu
	210					215					220				
Glu	Tyr	Cys	Lys	Ala	Tyr	Lys	Glu	Ser	Ser	His	Leu	Thr	Thr	His	Lys
225					230					235					240
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys
				245					250					255	
Ala	Phe	Ser	Ile	Phe	Ser	Thr	Leu	Thr	Lys	His	Lys	Ile	Ile	His	Thr
			260					265					270		
Glu	Glu	Lys	Ser	His	Arg	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Tyr	Lys	Glu
		275					280					285			
Ser	Ser	His	Val	Thr	Thr	His	Lys	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro
	290					295					300				
Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Thr	Phe	Ser	Val	Phe	Ser	Ile	Leu
305					310					315					320
Thr	Lys	His	Lys	Ile	Ile	His	Thr	Glu	Glu	Lys	Pro	Tyr	Lys	Cys	Glu
				325					330					335	
Glu	Cys	Gly	Lys	Ala	Phe	Lys	Arg	Ser	Ser	Thr	Leu	Thr	Lys	His	Arg
			340					345					350		

Ile	Ile	His	Thr	Glu	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys
		355					360					365			
Ala	Phe	Asn	Gln	Ser	Ser	Thr	Leu	Ser	Ile	His	Lys	Ile	Ile	His	Thr
	370					375					380				
Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Lys	Arg
385					390					395					400
Ser	Ser	Thr	Leu	Thr	Ile	His	Lys	Met	Ile	His	Thr	Gly	Glu	Lys	Pro
				405					410					415	
Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Asn	Arg	Ser	Ser	His	Leu
			420					425					430		
Thr	Thr	His	Lys	Arg	Ile	His	Thr	Gly	His	Lys	Pro	Tyr	Lys	Cys	Lys
		435					440					445			
Glu	Cys	Gly	Lys	Ser	Phe	Ser	Val	Phe	Ser	Thr	Leu	Thr	Lys	His	Lys
	450					455					460				
Ile	Ile	His	Thr	Asp	Lys	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys
465					470					475					480
Ala	Phe	Asn	Arg	Ser	Ser	Ile	Leu	Ser	Ile	His	Lys	Lys	Ile	His	Thr
				485					490					495	
Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Lys	Arg
			500					505					510		
Ser	Ser	His	Leu	Ala	Gly	His	Lys	Gln	Ile	His	Ser	Val	Gln	Lys	Pro
		515					520					525			
Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Ile	Phe	Ser	Thr	Leu
	530					535					540				
Thr	Lys	His	Lys	Ile	Ile	His	Thr	Glu	Glu	Lys	Pro	Tyr	Lys	Cys	Glu
545					550					555					560
Lys	Cys	Gly	Lys	Thr	Phe	Tyr	Arg	Phe	Ser	Asn	Leu	Asn	Thr	His	Lys
				565					570					575	
He	He	His	Thr	Glv	Glu	Lvs	Pro	Cvs	Lvs	Cvs	Glu	Glu	Cvs	Glv	Lvs

Ala Phe Asn His Ser Ser Asn Leu Ile Lys His Lys Leu Ile His Thr Gly Asp Lys Pro Tyr Lys Cys Glu Ala Cys Gly Lys Ala Phe Arg Arg Ser Ser His Leu Ser Arg His Lys Ile Ile His Ile Gly Ile His Thr Glu Glu Thr Val Gln Lys

<210> 3686

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3686

Met Ala Met Glu Gly Tyr Trp Arg Phe Leu Ala Leu Leu Gly Ser Ala

Leu Leu Val Gly Phe Leu Ser Val Ile Phe Ala Leu Val Trp Val Leu

His Tyr Arg Glu Gly Leu Gly Trp Asp Gly Ser Ala Leu Glu Phe Asn

Trp His Pro Val Leu Met Val Thr Gly Phe Val Phe Ile Gln Gly Ile

Ala Ser Phe Arg Phe Phe Ser Leu Ser Ala Ser Met Gly Ser Ala Phe

Ser Pro Ser Ile Ser His Ala His Thr Cys Leu Phe Trp Asn Cys His

Leu Trp Asn Ser Asp Cys Asn Ser Thr Tyr Gly Ile Asp Arg Glu Thr

100

Asp Phe Phe Pro Glu Arg Ser Cys Ile Gln Tyr Ile Pro Ala Arg Arg

115

120

125

Cys Phe Arg Lys Tyr Ala Trp Pro Ser Asp Pro Gly Val Arg Gly Pro

130

135

140

His Phe Leu Asp Ser His Gln Thr Ala Met Glu Thr Ser

155

150

<210> 3687

145

<211> 688

<212> PRT

<213> Homo sapiens

<400> 3687

Met Ala Ile Ser Pro Ser Leu Leu Pro Leu Ser Ser Pro Pro Asp Gly

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Ile Pro Gln Phe Asn Arg Arg His His Cys Arg Arg Cys Gly Arg Leu
20 25 30

Val Cys Ser Ser Cys Ser Thr Lys Lys Met Val Val Glu Gly Cys Arg

35 40 45

Glu Asn Pro Ala Arg Val Cys Asp Gln Cys Tyr Ser Tyr Cys Asn Lys
50 55 60

Asp Val Pro Glu Glu Pro Ser Glu Lys Pro Glu Ala Leu Asp Ser Ser 65 70 75 80

Lys Ser Glu Ser Pro Pro Tyr Ser Phe Val Val Arg Val Pro Lys Ala 85 90 95

Asp Glu Val Glu Trp Ile Leu Asp Leu Lys Glu Glu Glu Asn Glu Leu

			100					105					110		
Val	Arg	Ser	Glu	Phe	Tyr	Tyr	Glu	Gln	Ala	Pro	Ser	Ala	Ser	Leu	Cys
		115					120					125			
Ile	Ala	Ile	Leu	Asn	Leu	His	Arg	Asp	Ser	Ile	Ala	Cys	Gly	His	Gln
	130					135					140				
Leu	Ile	Glu	His	Cys	Cys	Arg	Leu	Ser	Lys	Gly	Leu	Thr	Asn	Pro	Glu
145					150					155					160
Val	Asp	Ala	Gly	Leu	Leu	Thr	Asp	Ile	Met	Lys	Gln	Leu	Leu	Phe	Ser
				165					170					175	
Ala	Lys	Met	Met	Phe	Val	Lys	Ala	Gly	Gln	Ser	Gln	Asp	Leu	Ala	Leu
			180					185					190		
Cys	Asp	Ser	Tyr	Ile	Ser	Lys	Val	Asp	Val	Leu	Asn	Ile	Leu	Val	Ala
		195					200					205			
Ala	Ala	Tyr	Arg	His	Val	Pro	Ser	Leu	Asp	Gln	Ile	Leu	Gln	Pro	Ala
	210					215					220				
Ala	Val	Thr	Arg	Leu	Arg	Asn	Gln	Leu	Leu	Glu	Ala	Glu	Tyr	Tyr	Gln
225					230					235					240
Leu	Gly	Val	Glu	Val	Ser	Thr	Lys	Thr	Gly	Leu	Asp	Thr	Thr	Gly	Ala
				245					250					255	
Trp	His	Ala	Trp	Gly	Met	Ala	Cys	Leu	Lys	Ala	Gly	Asn	Leu	Thr	Ala
			260					265					270		
Ala	Arg	Glu	Lys	Phe	Ser	Arg	Cys	Leu	Lys	Pro	Pro	Phe	Asp	Leu	Asn
		275					280					285			
Gln	Leu	Asn	His	Gly	Ser	Arg	Leu	Val	Gln	Asp	Val	Val	Glu	Tyr	Leu
	290					295					300				
Glu	Ser	Thr	Val	Arg	Pro	Phe	Val	Ser	Leu	Gln	Asp	Asp	Asp	Tyr	Phe
305					310					315					320
Ala	Thr	Leu	Arg	Glu	Leu	Glu	Ala	Thr	Leu	Arg	Thr	Gln	Ser	Leu	Ser
				325					330					335	

Leu	Ala	Val	Ile	Pro	Glu	Gly	Lys	Ile	Met	Asn	Asn	Thr	Tyr	Tyr	Gln
			340					345					350		
Glu	Cys	Leu	Phe	Tyr	Leu	His	Asn	Tyr	Ser	Thr	Asn	Leu	Ala	Ile	Ile
		355					360					365			
Ser	Phe	Tyr	Val	Arg	His	Ser	Cys	Leu	Arg	Glu	Ala	Leu	Leu	His	Leu
	370					375					380				
Leu	Asn	Lys	Glu	Ser	Pro	Pro	Glu	Val	Phe	Ile	Glu	Gly	Ile	Phe	Gln
385					390					395					400
Pro	Ser	Tyr	Lys	Ser	Gly	Lys	Leu	His	Thr	Leu	Glu	Asn	Leu	Leu	Glu
				405					410					415	
Ser	Ile	Asp	Pro	Thr	Leu	Glu	Ser	Trp	Gly	Lys	Tyr	Leu	Ile	Ala	Ala
			420					425					430		
Cys	Gln	His	Leu	Gln	Lys	Lys	Asn	Tyr	Tyr	His	Ile	Leu	Tyr	Glu	Leu
		435					440			•		445			
Gln	Gln	Phe	Met	Lys	Asp	Gln	Val	Arg	Ala	Ala	Met	Thr	Cys	Ile	Arg
	450					455					460				
Phe	Phe	Ser	His	Lys	Ala	Lys	Ser	Tyr	Thr	Glu	Leu	Gly	Glu	Lys	Let
465					470					475					480
Ser	Trp	Leu	Leu	Lys	Ala	Lys	Asp	His	Leu	Lys	Ile	Tyr	Leu	Gln	Glı
				485					490					495	
Thr	Ser	Arg	Ser	Ser	Gly	Arg	Lys	Lys	Thr	Thr	Phe	Phe	Arg	Lys	Lys
			500					505					510		
Met	Thr	Ala	Ala	Asp	Val	Ser	Arg	His	Met	Asn	Thr	Leu	Gln	Leu	Glr
		515					520					525			
Met	Glu	Val	Thr	Arg	Phe	Leu	His	Arg	Cys	Glu	Ser	Ala	Gly	Thr	Sei
	530					535					540				
Gln	Ile	Thr	Thr	Leu	Pro	Leu	Pro	Thr	Leu	Phe	Gly	Asn	Asn	His	Met
545					550					555					560
Lvs	Met	Asp	Val	Ala	Cvs	Lvs	Val	Met	Leu	Glv	Glv	Lys	Asn	Val	Gli

Asp Gly Phe Gly Ile Ala Phe Arg Val Leu Gln Asp Phe Gln Leu Asp Ala Ala Met Thr Tyr Cys Arg Ala Ala Arg Gln Leu Val Glu Lys Glu Lys Tyr Ser Glu Ile Gln Gln Leu Leu Lys Cys Val Ser Glu Ser Gly Met Ala Ala Lys Ser Asp Gly Asp Thr Ile Leu Leu Asn Cys Leu Glu Ala Phe Lys Arg Ile Pro Pro Gln Glu Leu Glu Gly Leu Ile Gln Ala Ile His Asn Asp Asp Asn Lys Ile Val Pro Ile Leu Ala Ala Leu Arg Asp Arg Val His Thr Glu Glu Arg Gly Arg Ser Pro Ser Thr Leu Cys

<210> 3688

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3688

Met Val Pro Leu His Ser Ser Pro Gly Leu Tyr Leu Gln Lys Lys Lys

1 5 10 15

Lys Gly Arg Lys Ile Ser Thr Gly Met Cys Gly Asp Leu Glu Ala Gly
20 25 30

Leu Pro Leu Thr Asn His Pro Gln Cys Gln Gly Asn Gln Lys Gln Thr
35 40 45

Ser Ser Ser Arg Glu Arg Arg Ala Cys Glu Thr Asp Thr Glu Glu Thr 50 60 55 Ala Thr Gly Glu Ser Thr Gln Gly Glu Arg Lys Ala Arg Ala Leu Pro 65 70 75 80 Cys Cys Gly Ser Gly Leu Phe Tyr His Pro Trp Gly His His Arg Pro 90 95 85 Arg Thr Phe Leu Leu Gly Ala Cys Ser Thr Ala Pro Pro Asp Arg Ser 105 100 110 Gly Leu Arg Glu Val Cys Trp Ile Thr Lys Met Arg Leu Gly Gly Gly 120 125 115 Gly Ser Arg Glu Glu Leu Ala His Arg Ser Gln Cys Arg Pro Asp Pro 130 135 140 Thr Gly Ala Gly Leu Thr Gln Gly Glu Ser Leu Gly Leu Leu Ser Gln 145 160 150 155 Ala Gly

<210> 3689

<211> 491

<212> PRT

<213> Homo sapiens

<400> 3689

Met Asn Ser Met Glu Ala Ala Val Gly Thr Glu Val Pro Leu Leu Asp

1 5 10 15

Asn Leu Gln His Cys Asn Ser Gly Asn Met Lys Pro Pro Leu Leu Val

20 25 30

Phe Ile Val Cys Leu Leu Trp Leu Lys Asp Ser His Cys Ala Pro Thr

		35					40					45			
Trp	Lys	Asp	Lys	Thr	Ala	Ile	Ser	Glu	Asn	Leu	Lys	Ser	Phe	Ser	Glu
	50					55					60				
Val	Gly	Glu	Ile	Asp	Ala	Asp	Glu	Glu	Val	Lys	Lys	Ala	Leu	Thr	Gly
65					70					75					80
Ile	Lys	Gln	Met	Lys	Ile	Met	Met	Glu	Arg	Lys	Glu	Lys	Glu	His	Thr
				85					90					95	
Asn	Leu	Met	Ser	Thr	Leu	Lys	Lys	Cys	Arg	Glu	Glu	Lys	Gln	Glu	Ala
			100					105					110		
Leu	Lys	Leu	Leu	Asn	Glu	Val	Gln	Glu	His	Leu	Glu	Glu	Glu	Glu	Arg
		115					120					125			
Leu	Cys	Arg	Glu	Ser	Leu	Ala	Asp	Ser	Trp	Gly	Glu	Cys	Arg	Ser	Cys
	130					135					140				
Leu	Glu	Asn	Asn	Cys	Met	Arg	Ile	Tyr	Thr	Thr	Cys	Gln	Pro	Ser	Trp
145					150					155					160
Ser	Ser	Val	Lys	Asn	Lys	Ile	Glu	Arg	Phe	Phe	Arg	Lys	Ile	Tyr	Gln
				165					170					175	
Phe	Leu	Phe	Pro	Phe	His	Glu	Asp	Asn	Glu	Lys	Asp	Leu	Pro	Ile	Ser
			180					185					190		
Glu	Lys	Leu	Ile	Glu	Glu	Asp	Ala	Gln	Leu	Thr	Gln	Met	Glu	Asp	Val
		195					200					205			
Phe	Ser	Gln	Leu	Thr	Val	Asp	Val	Asn	Ser	Leu	Phe	Asn	Arg	Ser	Phe
	210					215					220				
Asn	Val	Phe	Arg	Gln	Met	Gln	Gln	Glu	Phe	Asp	Gln	Thr	Phe	Gln	Ser
225					230					235					240
His	Phe	Ile	Ser	Asp	Thr	Asp	Leu	Thr	Glu	Pro	Tyr	Phe	Phe	Pro	Ala
				245					250					255	
Phe	Ser	Lys	Glu	Pro	Met	Thr	Lys	Ala	Asp	Leu	Glu	Gln	Cys	Trp	Asp
			260					265					270		

Ile	Pro	Asn	Phe	Phe	Gln	Leu	Phe	Cys	Asn	Phe	Ser	Val	Ser	Ile	Tyr
		275					280					285			
Glu	Ser	Val	Ser	Glu	Thr	Ile	Thr	Lys	Met	Leu	Glu	Ala	Ile	Glu	Asp
	290					295					300				
Leu	Pro	Lys	Gln	Asp	Lys	Ala	Pro	Asp	His	Gly	Gly	Leu	Ile	Ser	Lys
305					310					315					320
Met	Leu	Pro	Gly	Gln	Asp	Arg	Gly	Leu	Cys	Gly	Glu	Leu	Asp	Gln	Asn
				325					330					335	
Leu	Ser	Arg	Cys	Phe	Lys	Phe	His	Glu	Lys	Cys	Gln	Lys	Cys	Gln	Ala
			340					345					350		
His	Leu	Ser	Glu	Asp	Cys	Pro	Asp	Val	Pro	Ala	Leu	His	Thr	Glu	Leu
		355					360					365			
Asp	Glu	Ala	Ile	Arg	Leu	Val	Asn	Val	Ser	Asn	Gln	Gln	Tyr	Gly	Gln
	370					375					380				
Ile	Leu	Gln	Met	Thr	Arg	Lys	His	Leu	Glu	Asp	Thr	Ala	Tyr	Leu	Val
385					390					395					400
	Lys	Met	Arg	Gly	390 Gln	Phe	Gly	Trp	Val		Glu	Leu	Ala	Asn	
	Lys	Met	Arg	Gly 405		Phe	Gly	Trp	Val		Glu	Leu	Ala	Asn 415	
Glu				405					410	Ser				415	Gln
Glu				405	Gln				410	Ser				415	Gln
Glu · Ala	Pro	Glu	Thr 420	405 Glu	Gln	Ile	Phe	Asn 425	410 Ser	Ser	Gln	Val	Val 430	415 Pro	Gln Arg
Glu · Ala	Pro	Glu	Thr 420	405 Glu	Gln	Ile	Phe	Asn 425	410 Ser	Ser	Gln	Val	Val 430	415 Pro	Gln Arg
Glu Ala Ile	Pro His	Glu Glu 435	Thr 420 Gly	405 Glu Asn	Gln	Ile Ser	Phe Lys 440	Asn 425 Gln	410 Ser Asp	Ser Ile Glu	Gln Thr	Val Met 445	Val 430 Met	415 Pro Thr	Gln Arg Asp
Glu Ala Ile	Pro His	Glu Glu 435	Thr 420 Gly	405 Glu Asn	Gln Ile Ile	Ile Ser	Phe Lys 440	Asn 425 Gln	410 Ser Asp	Ser Ile Glu	Gln Thr	Val Met 445	Val 430 Met	415 Pro Thr	Gln Arg Asp
Glu Ala Ile Leu	Pro His Ser 450	Glu Glu 435 Ile	Thr 420 Gly Leu	405 Glu Asn Pro	Gln Ile Ile	Ile Ser Ser 455	Phe Lys 440 Asn	Asn 425 Gln Phe	410 Ser Asp Thr	Ser Ile Glu Leu	Gln Thr Lys 460	Val Met 445 Ile	Val 430 Met Pro	415 Pro Thr Leu	Gln Arg Asp Glu
Glu Ala Ile Leu	Pro His Ser 450	Glu Glu 435 Ile	Thr 420 Gly Leu	405 Glu Asn Pro	Gln Ile Ile Ser	Ile Ser Ser 455	Phe Lys 440 Asn	Asn 425 Gln Phe	410 Ser Asp Thr	Ser Ile Glu Leu	Gln Thr Lys 460	Val Met 445 Ile	Val 430 Met Pro	415 Pro Thr Leu	Gln Arg Asp Glu
Glu Ala Ile Leu Glu 465	Pro His Ser 450 Ser	Glu Glu 435 Ile Ala	Thr 420 Gly Leu Glu	405 Glu Asn Pro	Gln Ile Ile Ser	Ile Ser Ser 455 Asn	Phe Lys 440 Asn Phe	Asn 425 Gln Phe	410 Ser Asp Thr	Ser Ile Glu Leu Tyr 475	Gln Thr Lys 460	Val Met 445 Ile	Val 430 Met Pro	415 Pro Thr Leu	Gln Arg Asp Glu Ala

<210> 3690

<211> 911

<212> PRT

<213> Homo sapiens

<400> 3690

Met Cys Ser His Phe Thr Gln Asp Phe Leu Pro Val Gln Gly Ile Glu

1 5 10 15

Asp Ser Phe His Lys Leu Ile Leu Arg Arg Tyr Glu Lys Cys Gly His
20 25 30

Asp Asn Leu Gln Leu Arg Lys Gly Cys Lys Ser Met Asn Val Cys Lys

35 40 45

Val Gln Lys Gly Val Tyr Asn Gly Ile Asn Lys Cys Leu Ser Asn Thr
50 55 60

Gln Ser Lys Ile Phe Gln Cys Asn Ala Arg Val Lys Val Phe Ser Lys 65 70 75 80

Phe Ala Asn Ser Asn Lys Asp Lys Thr Arg His Thr Gly Glu Lys His
85 90 95

Phe Lys Cys Asn Glu Cys Gly Lys Ser Phe Gln Lys Phe Ser Asp Leu 100 105 110

Thr Gln His Lys Gly Ile His Ala Gly Glu Lys Pro Tyr Thr Cys Glu
115 120 125

Glu Arg Gly Lys Asp Phe Gly Trp Tyr Thr Asp Leu Asn Gln His Lys 130 135 140

Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys 145 150 155 160

Ala Phe Asn Arg Ser Thr Asn Leu Thr Ala His Lys Arg Ile His Asn 165 170 175

Arg	Glu	Lys	Ala	Tyr	Thr	Gly	Glu	Asp	Arg	Asp	Arg	Ala	Phe	Gly	Trp
			180					185					190		
Ser	Thr	Asn	Leu	Asn	Glu	Tyr	Lys	Lys	Ile	His	Thr	Gly	Asp	Lys	Pro
		195					200					205			
Tyr	Lys	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Met	His	Ser	Ser	His	Leu
	210					215					220				
Asn	Lys	His	Glu	Lys	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Lys
225					230					235					240
Glu	Cys	Gly	Lys	Val	Ile	Ser	Ser	Ser	Ser	Ser	Phe	Ala	Lys	His	Lys
				245					250					255	
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Lys	Cys	Leu	Glu	Cys	Gly	Lys
			260					265					270		
Ala	Phe	Asn	Ile	Ser	Thr	Thr	Leu	Thr	Lys	His	Arg	Arg	Ile	His	Thr
		275					280					285			
Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Val	Cys	Gly	Lys	Ala	Phe	Arg	Gln
	290					295					300				
Ser	Ala	Asn	Leu	Tyr	Val	His	Arg	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro
305					310					315					320
Tyr	Thr	Cys	Gly	Glu	Cys	Gly	Lys	Thr	Phe	Arg	Gln	Ser	Ala	Asn	Leu
				325					330					335	
Tyr	Val	His	Arg	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu
			340					345					350		
Asp	Cys	Gly	Lys	Ala	Phe	Gly	Arg	Tyr	Thr	Ala	Leu	Asn	Gln	His	Lys
		355					360					365			
Lys	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys
	370					375					380				
Ala	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Ala	His	Lys	Arg	Ile	His	Thr
385					390					395					400
Arg	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Asp	Arg	Gly	Arg	Ala	Phe	Gly	Leu

				405					410					415	
Ser	Thr	Asn	Leu	Asn	Glu	Tyr	Lys	Lys	Ile	His	Thr	Gly	Asp	Lys	Pro
			420					425					430		
Tyr	Lys	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Ile	His	Ser	Leu	His	Leu
		435					440					445			
Asn	Lys	His	Glu	Lys	Ile	His	Thr	Gly	Lys	Lys	Pro	Tyr	Lys	Cys	Lys
	450					455					460				
Gln	Cys	Gly	Lys	Val	Ile	Thr	Ser	Ser	Ser	Ser	Phe	Ala	Lys	His	Lys
465					470					475					480
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Glu	Cys	Leu	Glu	Cys	Gly	Lys
				485					490					495	
Ala	Phe	Thr	Ser	Ser	Thr	Thr	Leu	Thr	Lys	His	Arg	Arg	Ile	His	Thr
			500					505					510		
Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Val	Cys	Gly	Lys	Ala	Phe	Arg	Gln
		515					520					525			
Ser	Ala	Ile	Leu	Tyr	Val	His	Arg	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro
	530					535					540				
Tyr	Thr	Cys	Glu	Glu	Cys	Gly	Lys	Thr	Phe	Arg	Gln	Ser	Ala	Asn	Leu
545					550					555					560
Tyr	Val	His	Arg	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu
				565					570					575	
Glu	Cys	Gly	Lys	Ala	Phe	Gly	Arg	Tyr	Thr	Asp	Leu	Asn	Gln	His	Lys
			580					585					590		
Lys	Ile	His	Thr	Gly	Glu	Ĺys	Leu	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys
		595					600					605			
Asp	Phe	Val	Trp	Tyr	Thr	Asp	Leu	Asn	Gln	Gln	Lys	Lys	Ile	Tyr	Thr
	610					615					620				
Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Ala	Pro
625					630					635					640

Ser	Thr	Asp	Leu	Asn	Gln	His	Thr	Lys	Ile	Leu	Thr	Gly	Glu	Gln	Ser
				645					650					655	
Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Gly	Trp	Ser	Ile	Ala	Leu
			660					665					670		
Asn	Gln	His	Lys	Lys	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Glu
		675					680					685			
Glu	Cys	Gly	Lys	Ala	Phe	Ser	Arg	Ser	Arg	Asn	Leu	Thr	Thr	His	Arg
	690					695					700				
Arg	Val	His	Thr	Arg	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Asp	Arg	Gly	Arg
705					710					715					720
Ser	Phe	Gly	Trp	Ser	Thr	Asn	Leu	Asn	Glu	Tyr	Lys	Lys	Ile	His	Thr
				725					730					735	
Gly	Asp	Lys	Leu	Tyr	Lys	Cys	Lys	Glu	Cys	Gly	Lys	Val	Phe	Lys	Gln
			740			•		745					750		
Ser	Ser	His	Leu	Asn	Arg	His	Glu	Lys	Ile	His	Thr	Gly	Lys	Lys	Pro
		755					760					765			
Tyr	Lys	Cys	Lys	Glu	Cys	Gly	Lys	Val	Ile	Thr	Ser	Ser	Ser	Ser	Phe
	770					775					780				
Ala	Lys	His	Lys	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Lys	Cys	Leu
785					790					795					800
Glu	Cys	Gly	Lys	Ala	Phe	Thr	Ser	Ser	Thr	Thr	Leu	Thr	Lys	His	Arg
				805					810					815	
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Glu	Cys	Gly	Lys
			820					825					830		
Ala	Phe	Arg	Gln	Ser	Ala	Ile	Leu	Tyr	Val	His	Arg	Arg	Ile	His	Thr
		835					840					845			
Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Gly	Glu	Cys	Gly	Lys	Thr	Phe	Arg	Gln
	850					855					860				
Ser	Ala	Asn	Leu	Tvr	Ala	His	Lvs	Lvs	Tle	His	Thr	Glv	Glu	Lvs	Pro

865 870 875 880

Tyr Thr Cys Gly Asp Cys Gly Lys Thr Phe Arg Gln Ser Ala Asn Leu 885 890 895

Tyr Ala His Lys Lys Ile His Thr Gly Asp Lys Thr Ile Gln Val 900 905 910

<210> 3691

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3691

Met Ala Ala Gly Lys Glu Arg Met Arg Lys Met Gln Lys Gln Lys Ser

1 5 10 15

Leu Ile Lys Pro Ser Asp Leu Val Lys Leu Ile His Tyr Asn Glu Asn

20 25 30

Ser Ser Gly Glu Thr Ala Ser Met Ile Gln Leu Phe His Leu Gly Pro

35 40 45

Ser His Ser Met Trp Glu Leu Trp Glu Tyr Asn Ser Arg Gly Asp Ser

50 55 60

Gly Gly Asp Thr Ala Lys Pro Tyr Tyr Ser Ala Pro Gly Pro Ser Gln

65 70 75 80

Ile Leu Tyr Leu Tyr Ile Ser Glu Pro Ile Met His Ser Gln Arg Ser

85 90 95

Pro Lys Val Leu Thr His Phe Ser Ile Asn Ser Lys Val His Ser Pro

100 105 110

Lys Ser His Leu Arg Gln Gly Lys Ser Leu Leu Pro Ile Ser Leu

115 120 125

<210> 3692 <211> 724 <212> PRT <213> Homo sapiens <400> 3692 Met Lys Ser Ala Lys Gly Ile Glu Asn Leu Ala Phe Val Pro Ser Ser Pro Asp Ile Leu Arg Arg Leu Ser Ala Ser Pro Ser Gln Ile Glu Val Ser Ala Leu Ser Ser Asp Pro Gln Arg Glu Asn Ser Gln Pro Gln Glu Leu Gln Lys Pro Gln Glu Pro Gln Lys Ser Pro Glu Pro Ser Leu Pro Ser Ala Pro Pro Asn Val Ser Glu Glu Lys Leu Arg Ser Leu Ser Leu Ser Glu Phe Glu Glu Gly Ser Tyr Gly Trp Arg Asn Phe His Pro Gln Cys Leu Gln Arg Cys Asn Thr Pro Gly Gly Phe Leu Leu His Tyr Cys Leu Leu Ala Val Thr Gln Gly Ile Val Val Asn Gly Leu Val Asn Ile Ser Ile Ser Thr Val Glu Lys Arg Tyr Glu Met Lys Ser Ser Leu Thr Gly Leu Ile Ser Ser Ser Tyr Asp Ile Ser Phe Cys Leu Leu Ser Leu

Phe Val Ser Phe Phe Gly Glu Arg Gly His Lys Pro Arg Trp Leu Ala

				165					170					175	
Phe	Ala	Ala	Phe	Met	Ile	Gly	Leu	Gly	Ala	Leu	Val	Phe	Ser	Leu	Pro
			180					185					190		
Gln	Phe	Phe	Ser	Gly	Glu	Tyr	Lys	Leu	Gly	Ser	Leu	Phe	Glu	Asp	Thr
		195					200					205			
Cys	Val	Thr	Thr	Arg	Asn	Ser	Thr	Ser	Cys	Thr	Ser	Ser	Thr	Ser	Ser
	210					215					220				
Leu	Ser	Asn	Tyr	Leu	Tyr	Val	Phe	Ile	Leu	Gly	Gln	Leu	Leu	Leu	Gly
225					230					235					240
Ala	Gly	Gly	Thr	Pro	Leu	Tyr	Thr	Leu	Gly	Thr	Ala	Phe	Leu	Asp	Asp
				245					250					255	
Ser	Val	Pro	Thr	His	Lys	Ser	Ser	Leu	Tyr	Ile	Gly	Thr	Gly	Tyr	Ala
			260					265					270		
Met	Ser	Ile	Leu	Gly	Pro	Ala	Ile	Gly	Tyr	Val	Leu	Gly	Gly	Gln	Leu
		275					280					285			
Leu	Thr	Ile	Tyr	Ile	Asp	Val	Ala	Met	Gly	Glu	Ser	Thr	Asp	Val	Thr
	290					295					300				
Glu	Asp	Asp	Pro	Arg	Trp	Leu	Gly	Ala	Trp	Trp	Ile	Gly	Phe	Leu	Leu
305					310					315					320
Ser	Trp	Ile	Phe	Ala	Trp	Ser	Leu	Ile	Ile	Pro	Phe	Ser	Cys	Phe	Pro
				325					330					335	
Lys	His	Leu	Pro	Gly	Thr	Ala	Glu	Ile	Gln	Ala	Gly	Lys	Thr	Ser	Gln
			340					345					350		
Ala	His	Gln	Ser	Asn	Ser	Asn	Ala	Asp	Val	Lys	Phe	Gly	Lys	Ser	Ile
		355					360					365			
Lys	Asp	Phe	Pro	Ala	Ala	Leu	Lys	Asn	Leu	Met	Lys	Asn	Ala	Val	Phe
	370					375			-		380				
Met	Cys	Leu	Val	Leu	Ser	Thr	Ser	Ser	Glu	Ala	Leu	Ile	Thr	Thr	Gly
385					390					395					400

Phe	Ala	Thr	Phe	Leu	Pro	Lys	Phe	Ile	Glu	Asn	Gln	Phe	Gly	Leu	Thr
				405					410					415	
Ser	Ser	Phe	Ala	Ala	Thr	Leu	Gly	Gly	Ala	Val	Leu	Ile	Pro	Gly	Ala
			420					425					430		
Ala	Leu	Gly	Gln	Ile	Leu	Gly	Gly	Phe	Leu	Val	Ser	Lys	Phe	Arg	Met
		435					440					445			
Thr	Cys	Lys	Asn	Thr	Met	Lys	Phe	Ala	Leu	Phe	Thr	Ser	Gly	Val	Ala
	450					455					460				
Leu	Thr	Leu	Ser	Phe	Val	Phe	Met	Tyr	Ala	Lys	Cys	Glu	Asn	Glu	Pro
465					470					475					480
Phe	Ala	Gly	Val	Ser	Glu	Ser	Tyr	Asn	Gly	Thr	Gly	Glu	Leu	Gly	Asn
				485					490					495	
Leu	Ile	Ala	Pro	Cys	Asn	Ala	Asn	Cys	Asn	Cys	Ser	Arg	Ser	Tyr	Tyr
			500					505					510		
Tyr	Pro	Val	Cys	Gly	Asp	Gly	Val	Gln	Tyr	Phe	Ser	Pro	Cys	Phe	Ala
		515					520					525			
Gly	Cys	Ser	Asn	Pro	Val	Ala	His	Arg	Lys	Pro	Lys	Val	Tyr	Tyr	Asn
	530					535					540				
Cys	Ser	Cys	Ile	Glu	Arg	Lys	Thr	Glu	Ile	Thr	Ser	Thr	Ala	Glu	Thr
545					550					555					560
Phe	Gly	Phe	Glu	Ala	Lys	Ala	Gly	Lys	Cys	Glu	Thr	His	Cys	Ala	Lys
				565					570					575	
Leu	Pro	Ile	Phe	Leu	Cys	Ile	Phe	Phe	Ile	Val	Ile	Ile	Phe	Thr	Phe
			580					585					590		
Met	Ala	Gly	Thr	Pro	Ile	Thr	Val	Ser	Ile	Leu	Arg	Cys	Val	Asn	His
		595					600					605			
Arg	Gln	Arg	Ser	Leu	Ala	Leu	Gly	Ile	Gln	Phe	Met	Val	Leu	Arg	Leu
	610					615					620				
Lau	Clv	Thr	Tle	Pro	G1 _v	Pro	Tle	He	Phe	Glaz	Phe	Thr	Tle	Aen	Sar

625 630 635 640 Thr Cys Ile Leu Trp Asp Ile Asn Asp Cys Gly Ile Lys Gly Ala Cys 645 650 655 Trp Ile Tyr Asp Asn Ile Lys Met Ala His Met Leu Val Ala Ile Ser 660 665 670 Val Thr Cys Lys Val Ile Thr Met Phe Phe Asn Gly Phe Ala Ile Phe 675 680 685 Leu Tyr Lys Pro Pro Pro Ser Ala Thr Asp Val Ser Phe His Lys Glu

690 695 700

Asn Ala Val Val Thr Asn Val Leu Ala Glu Gln Asp Leu Asn Lys Ile
705 710 715 720

Val Lys Glu Gly

<210> 3693

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3693

Met Val Glu Leu Val Glu Gly Ala Arg Lys Leu Arg His Val Phe Leu

1 5 10 15

Phe Thr Asp Leu Leu Cys Thr Lys Leu Lys Lys Gln Ser Gly Gly
20 25 30

Lys Thr Gln Gln Tyr Asp Cys Lys Trp Tyr Ile Pro Leu Thr Asp Leu
35 40 45

Ser Phe Gln Met Val Asp Glu Leu Glu Ala Val Pro Asn Ile Pro Leu 50 55 60

Val Pro Asp Glu Glu Leu Asp Ala Leu Lys Ile Lys Ile Ser Gln Ile Lys Ser Asp Ile Gln Arg Glu Lys Arg Ala Asn Lys Gly Ser Lys Ala Thr Glu Arg Leu Lys Lys Leu Ser Glu Gln Glu Ser Leu Leu Leu Leu Met Ser Pro Ser Met Ala Phe Arg Val His Ser Arg Asn Gly Lys Ser Tyr Thr Phe Leu Ile Ser Ser Asp Tyr Glu Arg Ala Glu Trp Arg Glu Asn Ile Arg Glu Gln Gln Lys Lys Cys Phe Arg Ser Phe Ser Leu Thr Ser Val Glu Leu Gln Met Leu Thr Asn Ser Cys Val Lys Leu Gln Thr Val His Ser Ile Pro Leu Thr Ile Asn Lys Glu Gly Gly Pro Pro Arg Phe Arg Val Gln Gly Thr Cys Arg Glu Gly Arg Gln Leu Ala

<210> 3694

<211> 588

<212> PRT

<213> Homo sapiens

<400> 3694

Met Asn Asp Arg Leu Pro Gly Lys Lys Thr Thr Lys Leu Trp Val Pro

1 5 10 15

Asp Glu Glu Val Ser Pro Glu Thr Met Val Lys Ile Gln Ala Ile Lys

			20					25					30		
Met	Met	Val	Arg	Trp	Leu	Leu	Gly	Met	Lys	Asn	Asn	His	Ser	Lys	Ser
		35					40					45			
Gly	Thr	Ser	Thr	Leu	Arg	Leu	Leu	Thr	Thr	Ile	Leu	His	Ser	Asp	Gly
	50					55					60				
Asp	Leu	Thr	Glu	Gln	Gly	Lys	Ile	Ser	Lys	Pro	Asp	Met	Ser	Arg	Leu
65					70					75					80
Arg	Leu	Ala	Ala	Gly	Ser	Ala	Ile	Val	Lys	Leu	Ala	Gln	Glu	Pro	Cys
				85					90					95	
Tyr	His	Glu	Ile	Ile	Thr	Leu	Glu	Gln	Tyr	Gln	Leu	Cys	Ala	Leu	Ala
			100					105					110		
Ile	Asn	Asp	Glu	Cys	Tyr	Gln	Val	Arg	Gln	Val	Phe	Ala	Gln	Lys	Leu
		115					120					125			
His	Lys	Gly	Leu	Ser	Arg	Leu	Arg	Leu	Pro	Leu	Glu	Tyr	Met	Ala	Ile
	130					135					140				
Cys	Ala	Leu	Cys	Ala	Lys	Asp	Pro	Val	Lys	Glu	Arg	Arg	Ala	His	Ala
145					150					155					160
Arg	Gln	Cys	Leu	Val	Lys	Asn	Ile	Asn	Val	Arg	Arg	Glu	Tyr	Leu	Lys
				165					170					175	
Gln	His	Ala	Ala	Val	Ser	Glu	Lys	Leu	Leu	Ser	Leu	Leu	Pro	Glu	Tyr
			180					185					190		
Val	Val	Pro	Tyr	Thr	Ile	His	Leu	Leu	Ala	His	Asp	Pro	Asp	Tyr	Val
		195					200					205			
Lys	Val	Gln	Asp	Ile	Glu	Gln	Leu	Lys	Asp	Val	Lys	Glu	Cys	Leu	Trp
	210					215					220				
Phe	Val	Leu	Glu	Ile	Leu	Met	Ala	Lys	Asn	Glu	Asn	Asn	Ser	His	Ala
225					230					235					240
Phe	Ile	Arg	Lys	Met	Val	Glu	Asn	Ile	Lys	Gln	Thr	Lys	Asp	Ala	Gln
				245					250					255	

Gly	Pro	Asp	Asp	Ala	Lys	Met	Asn	Glu	Lys	Leu	Tyr	Thr	Val	Cys	Asp
			260					265					270		
Val	Ala	Met	Asn	Ile	Ile	Met	Ser	Lys	Ser	Thr	Thr	Tyr	Ser	Leu	Glu
		275					280					285			
Ser	Pro	Lys	Asp	Pro	Val	Leu	Pro	Ala	Arg	Phe	Phe	Thr	Gln	Pro	Asp
	290					295					300				
Lys	Asn	Phe	Ser	Asn	Thr	Lys	Asn	Tyr	Leu	Pro	Pro	Glu	Met	Lys	Ser
305					310					315					320
Phe	Phe	Thr	Pro	Gly	Lys	Pro	Lys	Thr	Thr	Asn	Val	Leu	Gly	Ala	Val
				325					330					335	
Asn	Lys	Pro	Leu	Ser	Ser	Ala	Gly	Lys	Gln	Ser	Gln	Thr	Lys	Ser	Ser
			340					345					350		
Arg	Met	Glu	Thr	Val	Ser	Asn	Ala	Ser	Ser	Ser	Pro	Asn	Pro	Ser	Ser
		355					360					365			
Pro	Gly	Arg	Ile	Lys	Gly	Arg	Leu	Asp	Ser	Ser	Glu	Met	Asp	His	Ser
	370					375					380				
Glu	Asn	Glu	Asp	Tyr	Thr	Met	Ser	Ser	Pro	Leu	Pro	Gly	Lys	Lys	Ser
385					390					395					400
Asp	Lys	Arg	Asp	Asp	Ser	Asp	Leu	Val	Arg	Ser	Glu	Leu	Glu	Lys	Pro
				405					410					415	
Arg	Gly	Arg	Lys	Lys	Thr	Pro	Val	Thr	Glu	Gln	Glu	Glu	Lys	Leu	Gly
			420					425					430		
Met	Asp	Asp	Leu	Thr	Lys	Leu	Val	Gln	Glu	Gln	Lys	Pro	Lys	Gly	Ser
		435					440					445			
Arg	Arg	Ser	Arg	Lys	Arg	Gly	His	Thr	Ala	Ser	Glu	Ser	Asp	Glu	Gln
	450					455					460				
Gln	Trp	Pro	Glu	Glu	Lys	Arg	Leu	Lys	Glu	Asp	Ile	Leu	Glu	Asn	Glu
465					470					475					480
Asp	Glu	Gln	Asn	Ser	Pro	Pro	Lvs	Lvs	Glv	Lvs	Arg	Glv	Arg	Pro	Pro

485 490 495 Lys Pro Leu Gly Gly Gly Thr Pro Lys Glu Glu Pro Thr Met Lys Thr 500 505 510 Ser Lys Lys Gly Ser Lys Lys Ser Gly Pro Pro Ala Pro Glu Glu 520 525 515 Glu Glu Glu Glu Glu Arg Gln Ser Gly Asn Thr Glu Gln Lys Ser Lys 540 530 535 Ser Lys Gln His Arg Val Ser Arg Arg Ala Gln Gln Arg Ala Glu Ser 545 550 555 560 Pro Glu Ser Ser Ala Ile Glu Ser Thr Gln Ser Thr Pro Gln Lys Gly 565 570 575 Arg Gly Arg Pro Ser Lys Thr Pro Ser Pro Ser Gln 580 585

<210> 3695

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3695

Met Gln Cys Val Pro Asp Val Tyr Ile Asp Ser Met Gly Tyr Ala Phe

1 5 10 15

Thr Leu Pro Leu Phe Lys Tyr Ile Gly Gly Cys Gln Val Gly Ser Tyr
20 25 30

Val His Tyr Pro Thr Ile Ser Thr Asp Met Leu Ser Val Val Lys Asn
35 40 45

Gln Asn Ile Gly Phe Asn Asn Ala Ala Phe Ile Thr Arg Asn Pro Phe
50 55 60

Leu	Ser	Lys	Val	Lys	Leu	Ile	Tyr	Tyr	Tyr	Leu	Phe	Ala	Phe	Ile	Tyr
65					70					75					80
Gly	Leu	Val	Gly	Ser	Cys	Ser	Asp	Val	Val	Met	Val	Asn	Ser	Ser	Trp
				85					90					95	
Thr	Leu	Asn	His	Ile	Leu	Ser	Leu	Trp	Lys	Ala	Gly	Asn	Cys	Thr	Asn
			100					105					110		
Ile	Val	Tyr	Pro	Pro	Cys	Asp	Val	Gln	Thr	Phe	Leu	Asp	Ile	Pro	Leu
		115					120					125			
His	Glu	Lys	Lys	Met	Thr	Pro	Gly	His	Leu	Leu	Val	Ser	Val	Gly	Gln
	130					135					140				
Phe	Arg	Pro	Glu	Lys	Asn	His	Pro	Leu	Gln	Ile	Arg	Ala	Phe	Ala	Lys
145					150					155					160
Leu	Leu	Asn	Lys	Lys	Met	Val	Glu	Ser	Pro	Pro	Ser	Leu	Lys	Leu	Val
				165					170					175	
Leu	Ile	Gly	Gly	Cys	Arg	Asn	Lys	Asp	Asp	Glu	Leu	Arg	Val	Asn	Gln
			180					185					190		
Leu	Arg	Arg	Leu	Ser	Glu	Asp	Leu	Gly	Val	Gln	Glu	Tyr	Val	Glu	Phe
		195					200					205			
Lys	Ile	Asn	Ile	Pro	Phe	Asp	Glu	Leu	Lys	Asn	Tyr	Leu	Ser	Glu	Ala
	210					215					220				
Thr	Ile	Gly	Leu	His	Thr	Met	Trp	Asn	Glu	His	Phe	Gly	Ile	Gly	Val
225					230					235					240
Val	Glu	Cys	Met	Ala	Ala	Gly	Thr	Ile	Ile	Leu	Ala	His	Asn	Ser	Gly
				245					250					255	
Gly	Pro	Lys	Leu	Asp	Ile	Val	Val	Pro	His	Glu	Gly	Asp	Ile	Thr	Gly
			260					265					270		
Phe	Leu	Ala	Glu	Ser	Glu	Glu	Asp	Tyr	Ala	Glu	Thr	Ile	Ala	His	Ile
		275				•	280					285			
Leu	Ser	Met	Ser	Ala	Glu	Lvs	Arg	Leu	Gln	Ile	Arg	Lvs	Ser	Ala	Arg

290 295 300

Ala Ser Val Ser Arg Phe Ser Asp Gln Glu Phe Glu Val Thr Phe Leu 305 310 315 320

Ser Ser Val Glu Lys Leu Phe Lys

325

<210> 3696

<211> 1307

<212> PRT

<213> Homo sapiens

<400> 3696

Met Gly His Pro Gly Ser Arg Lys Phe Asn Ile Thr Glu Ser Val Leu

1 5 10 15

Gln Gly Leu Leu Lys Pro Leu Leu Lys Ser Thr Ser Val Gly Pro Leu
20 25 30

Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu Lys Asp Gly Val
35 40 45

Ala Thr Arg Val Asp Ala Ile Cys Thr His Arg Pro Asp Pro Lys Ile
50 55 60

Pro Gly Leu Asp Arg Gln Gln Leu Tyr Trp Glu Leu Ser Gln Leu Thr
65 70 75 80

His Ser Ile Thr Glu Leu Gly Pro Tyr Thr Leu Asp Arg Asp Ser Leu 85 90 95

Tyr Val Asn Gly Phe Thr Gln Arg Ser Ser Val Pro Thr Thr Ser Thr
100 105 110

Pro Gly Thr Phe Thr Val Gln Pro Glu Thr Ser Glu Thr Pro Ser Ser 115 . 120 . 125

Leu	Pro	Gly	Pro	Thr	Ala	Thr	Gly	Pro	Val	Leu	Leu	Pro	Phe	Thr	Leu
	130					135					140				
Asn	Phe	Thr	Ile	Ile	Asp	Leu	Gln	Tyr	Glu	Glu	Asp	Met	His	Arg	Pro
145					150					155					160
Gly	Ser	Arg	Lys	Phe	Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu
				165					170					175	
Met	Pro	Leu	Phe	Lys	Asn	Thr	Ser	Val	Ser	Ser	Leu	Tyr	Ser	Gly	Cys
			180					185					190		
Arg	Leu	Thr	Leu	Leu	Arg	Pro	Glu	Lys	Asp	Gly	Ala	Ala	Thr	Arg	Val
		195					200					205			
Asp	Ala	Val	Cys	Thr	His	Arg	Pro	Asp	Pro	Lys	Ser	Pro	Gly	Leu	Asp
	210					215					220				
Arg	Glu	Arg	Leu	Tyr	Trp	Lys	Leu	Ser	Gln	Leu	Thr	His	Gly	Ile	Thr
225					230					235					240
Glu	Leu	Gly	Pro	Tyr	Thr	Leu	Asp	Arg	His	Ser	Leu	Tyr	Val	Asn	Gly
				245					250					255	
Phe	Thr	His	Gln	Ser	Ser	Met	Thr	Thr	Thr	Arg	Thr	Pro	Asp	Thr	Ser
			260					265					270		
Thr	Met	His	Leu	Ala	Thr	Ser	Arg	Thr	Pro	Ala	Ser	Leu	Ser	Gly	Pro
		275					280					285			
Thr	Thr	Ala	Ser	Pro	Leu	Leu	Val	Leu	Phe	Thr	Ile	Asn	Phe	Thr	Ile
	290					295					300				
Thr	Asn	Leu	Arg	Tyr	Glu	Glu	Asn	Met	His	His	Pro	Gly	Ser	Arg	Lys
305				•	310					315					320
Phe	Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	Arg	Pro	Val	Phe
				325					330					335	
Lys	Asn	Thr	Ser	Val	Gly	Pro	Leu	Tyr	Ser	Gly	Cys	Arg	Leu	Thr	Leu
			340					345					350		
Leu	Arg	Pro	Lvs	Lvs	Asp	Glv	Ala	Ala	Thr	Lvs	Val	Asp	Ala	He	Cvs

		355					360					365			
Thr	Tyr	Arg	Pro	Asp	Pro	Lys	Ser	Pro	Gly	Leu	Asp	Arg	Glu	Gln	Leu
	370					375					380				
Tyr	Trp	Glu	Leu	Ser	Gln	Leu	Thr	His	Ser	Ile	Thr	Glu	Leu	Gly	Pro
385					390					395					400
Tyr	Thr	Leu	Asp	Arg	Asp	Ser	Leu	Tyr	Val	Asn	Gly	Phe	Thr	Gln	Arg
				405					410					415	
Ser	Ser	Val	Pro	Thr	Thr	Ser	Ile	Pro	Gly	Thr	Pro	Thr	Val	Asp	Leu
			420					425					430		
Gly	Thr	Ser	Gly	Thr	Pro	Val	Ser	Lys	Pro	Gly	Pro	Ser	Ala	Ala	Ser
		435					440					445			
Pro	Leu	Leu	Val	Leu	Phe	Thr	Leu	Asn	Phe	Thr	Ile	Thr	Asn	Leu	Arg
	450					455					460				
Tyr	Glu	Glu	Asn	Met	Gln	His	Pro	Gly	Ser	Arg	Lys	Phe	Asn	Thr	Thr
465					470					475					480
Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	Arg	Ser	Leu	Phe	Lys	Ser	Thr	Ser
				485					490					495	
Val	Gly	Pro	Leu	Tyr	Ser	Gly	Cys	Arg	Leu	Thr	Leu	Leu	Arg	Pro	Glu
			500					505					510		
Lys	Asp	Gly	Thr	Ala	Thr	Gly	Val	Asp	Ala	Ile	Cys	Thr	His	His	Pro
		515					520					525			
Asp	Pro	Lys	Ser	Pro	Arg	Leu	Asp	Arg	Glu	Gln	Leu	Tyr	Trp	Glu	Leu
	530					535					540				
Ser	Gln	Leu	Thr	His	Asn	Ile	Thr	Glu	Leu	Gly	Pro	Tyr	Ala	Leu	Asp
545					550					555					560
Asn	Asp	Ser	Leu	Phe	Val	Asn	Gly	Phe	Thr	His	Arg	Ser	Ser	Val	Ser
				565					570					575	
Thr	Thr	Ser	Thr	Pro	Gly	Thr	Pro	Thr	Val	Tyr	Leu	Gly	Ala	Ser	Lys
			580					585					590		

Thr	Pro	Ala	Ser	Ile	Phe	Gly	Pro	Ser	Ala	Ala	Ser	His	Leu	Leu	Ile
		595					600					605			
Leu	Phe	Thr	Leu	Asn	Phe	Thr	Ile	Thr	Asn	Leu	Arg	Tyr	Glu	Glu	Asn
	610					615					620				
Met	Trp	Pro	Gly	Ser	Arg	Lys	Phe	Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln
625					630					635					640
Gly	Leu	Leu	Arg	Pro	Leu	Phe	Lys	Asn	Thr	Ser	Val	Gly	Pro	Leu	Tyr
				645					650					655	
Ser	Gly	Cys	Arg	Leu	Thr	Leu	Leu	Arg	Pro	Glu	Lys	Asp	Gly	Glu	Ala
			660					665					670		
Thr	Gly	Val	Asp	Ala	Ile	Cys	Thr	His	Arg	Pro	Asp	Pro	Thr	Gly	Pro
		675					680					685			
Gly	Leu	Asp	Arg	Glu	Gln	Leu	Tyr	Leu	Glu	Leu	Ser	Gln	Leu	Thr	His
	690					695					700				
Ser	Ile	Thr	Glu	Leu	Gly	Pro	Tyr	Thr	Leu	Asp	Arg	Asp	Ser	Leu	Tyr
705					710					715					720
Phe	Asn	Gly	Phe	Thr	His	Arg	Ser	Ser	Val	Pro	Thr	Thr	Ser	Thr	Gly
				725					730					735	
Val	Val	Ser	Glu	Glu	Pro	Phe	Thr	Leu	Asn	Phe	Thr	Ile	Asn	Asn	Leu
			740					745					750		
Arg	Tyr	Met	Ala	Asp	Met	Gly	Gln	Pro	Gly	Ser	Leu	Lys	Phe	Asn	Ilε
		755					760					765			
Thr	Asp	Asn	Val	Met	Gln		Leu	Leu	Ser	Pro	Leu	Phe	Gln	Arg	Ser
	770					775					780				
Ser	Leu	Gly	Ala	Arg	Tyr	Thr	Gly	Cys	Arg	Val	Ile	Ala	Leu	Arg	
785					790					795					800
Val	Lys	Asn	Gly	Ala	Glu	Thr	Arg	Val		Leu	Leu	Cys	Thr		Leu
				805					810					815	
Gln	Pro	Leu	Ser	Glv	Pro	Glv	Leu	Pro	Ile	Lvs	Gln	Val	Phe	His	Glu

	820		;	825					830		
Leu Ser Gln	Gln Thr	His Gly	Ile '	Thr	Arg	Leu	Gly	Pro	Tyr	Ser	Leu
835			840					845			
Asp Lys Asp	Ser Leu	Tyr Leu	Asn	Gly	Tyr	Asn	Glu	Pro	Gly	Pro	Asp
850		855					860				
Glu Pro Pro	Thr Thr	Met Gly	Tyr 1	His	Leu	Lys	Thr	Leu	Thr	Leu	Asn
865		870				875					880
Phe Thr Ile	Ser Asn	Leu Gln	Tyr	Ser	Pro	Asp	Met	Gly	Lys	Gly	Ser
	885				890					895	
Ala Thr Phe	Asn Ser	Thr Glu	Gly	Val	Leu	Gln	His	Leu	Leu	Arg	Pro
	900		!	905					910		
Leu Phe Gln	Lys Ser	Ser Met	Gly 3	Pro	Phe	Tyr	Leu	Gly	Cys	Gln	Leu
915			920					925			
Ile Ser Leu	Arg Pro	Glu Lys	Asp	Gly	Ala	Ala	Thr	Gly	Val	Asp	Thr
930		935					940				
Thr Cys Thr	Tyr His	Pro Asp	Pro	Val	Gly	Pro	Gly	Leu	Ásp	Ile	Gln
945		950				955					960
Gln Leu Tyr	Trp Glu	Leu Ser	Gln	Leu	Thr	His	Gly	Val	Thr	Gln	Leu
	965				970					975	
Gly Phe Tyr	Val Leu	Asp Arg	Asp	Ser	Leu	Phe	Ile	Asn	Gly	Tyr	Ala
	980		i	985					990		
Pro Gln Asn	Leu Ser	Ile Arg	Gly	Glu	Tyr	Gln	Ile	Asn	Phe	His	Ile
995			1000				-	1005			
Val Asn Trp	Asn Leu	Ser Asn	Pro .	Asp	Pro	Thr	Ser	Ser	Glu	Tyr	Ile
1010		1015					1020				
Thr Leu Leu	Arg Asp	Ile Gln	Asp	Lys	Val	Thr	Thr	Leu	Tyr	Lys	Gly
1025		1030]	1035				-	1040
Ser Gln Leu	His Asp	Thr Phe	Arg	Phe	Cys	Leu	Val	Thr	Asn	Leu	Thr
	1045			1	.050					1055	

Leu	ASN	ser	ser	Pne	Leu	Ага	Lys	vai	Inr	vai	Leu	vai	Ser	Asp	Met
		1070	-				1065	-				1060			
Ala	Asn	Leu	Thr	Lys	Asp	Leu	Phe	Val	Gln	Glu	Val	Leu	Ser	Pro	Asp
			1085					1080	-				1075		
Val	His	Ile	Asp	Val	Leu	Gln	Tyr	Thr	Ser	Gly	Leu	Trp	His	Phe	Ser
				1100]				1095	-				1090	
Thr	Ser	Ser	Ser	Ser	Thr	Pro	Gln	Tyr	Val	Ser	Ser	Glu	Met	Glu	Thr
1120					1115					1110				5	1109
Gln	Ser	Tyr	Pro	Leu	Asn	Thr	Ile	Thr	Phe	Asn	Leu	Tyr	Phe	His	Gln
	1135	-				1130	-				1125	-			
Asn	Arg	Lys	Asn	Arg	Gln	Tyr	Asn	Thr	Thr	Gly	Pro	Gln	Ala	Lys	Asp
		1150					1145					1140			
Ser	Lys	Ile	Ser	Ser	Asn	Arg	Phe	Leu	Gln	Asn	Leu	Ala	Asp	Glu	Ile
			1165					1160					1155		
Arg	Asn	Pro	Val	Ser	Arg	Phe	Thr	Ser	Val	Gln	Cys	Asp	Ser	Phe	Tyr
				1180	-				1175	•				1170	
Arg	Ala	Leu	Pro	Ser	Phe	Asn	Cys	Leu	Ser	Asp	Val	Gly	Thr	His	His
1200					1195					1190				5	118
Arg	Thr	Met	Arg	Leu	Phe	Glu	Glu	Tyr	Ile	Ala	Val	Arg	Asp	Val	Arg
	1215					1210	-				1205				
Leu	Val	Ser	Ser	Arg	Asp	Leu	Thr	Phe	Asn	Gln	Leu	Gln	Thr	Gly	Asn
		1230					1225					1220			
Ser	Asn	Gly	Thr	Leu	Pro	Glu	Asn	Arg	Asn	Pro	Ser	Tyr	Gly	Asp	Val
			1245					1240					1235		
Leu	Leu	Gly	Ala	Leu	Gly	Ile	Leu	Ile	Val	Ala	Trp	Phe	Pro	Leu	Asp
				1260					1255					1250	•
Arg	Arg	Thr	Thr	Val	Leu	Val	Gly	Cys	Ile	Leu	Cys	Thr	Ile	Leu	Gly
1280					1275					1270				5	126
Tyr	Gly	Pro	Cys	Gln	Gln	Gln	Val	Asn	Tyr	Glu	Gly	Glu	Lys	Lvs	Arg

1285 1290 1295

Tyr Gln Ser His Leu Asp Leu Glu Asp Leu Gln 1300 1305

<210> 3697

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3697

Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala

1 5 10 15

Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly

20 25 30

Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg

35 40 45

Val Ala Val Arg Ser Ala Tyr Gly Gly Pro Val Gly Ala Gly Ile Arg

50 55 60

Glu Val Thr Ile Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Asp Ala

65 70 75 80

Asp Pro Ser Leu Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Lys Ser

85 90 95

Ala Lys Ser Ser Arg Leu Pro Asp Ile Phe Glu Ala Gln Ile Ala Gly

100 105 110

Leu Arg Gly Gln Leu Glu Ala Leu Gln Val Asp Gly Gly Arg Leu Glu

115 120 125

Ala Glu Leu Arg Ser Met Gln Asp Val Val Glu Asp Phe Lys Asn Lys

130 135 140

Tyr Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn Glu Phe Val 150 155 160 145 Val Leu Lys Lys Asp Val Asp Ala Ser Tyr Met Ser Lys Val Glu Leu 170 175 165 Glu Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe Leu Arg Thr 190 180 185 Leu Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile Ser Asp Thr 200 205 195 Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Leu Asp Gly 215 220 210 Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala Lys Cys Ser 235 240 225 230 Arg Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Val 250 245

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<211> 100

<212> PRT

<213> Homo sapiens

<400> 3698

Met Gly Arg Leu Ala Gly Gly Gln Ala Pro Tyr Leu Trp Glu Gln Gly

1 5 10 15

Phe Ala Gln Pro Pro Trp Asp Ala Leu Gly Leu Leu Thr Ala Gln Asp
20 25 30

Pro Ser Arg Glu Ala Ala Trp Ile Gly Gly Ser Gly Leu Thr Ala Gly
35 40 45

Leu Gly Leu Glu Pro Ser Pro Cys Pro Ala Gln Ala Pro Ala Glu Pro

Gly Ala Leu Ala Glu Ala Gly Leu Gly Ser Gly Ala Ala Gly Arg Pro Pro Ile Ser His Ser Leu Gly Val Leu Arg Val Thr Gln Arg Thr Val Lys Cys Trp Ile <210> 3699 <211> 525 <212> PRT <213> Homo sapiens <400> 3699 Met Ser Lys Ala Ser Pro Ser Ser Leu Leu Ala Lys Phe Ser Glu Asp Thr Leu Ser Ser Tyr Thr Glu Ala Val Ser Ser Gln Glu Met Leu Arg Cys Ile Trp Gly His Phe Leu Arg Val Leu Gly Gly Thr Ser Pro Thr Leu Ser His Ser Ser Ser Leu Leu His Ser Leu Gly Ser Val Thr Val Leu Cys Cys Val Asp Lys Gln Gly Ile Leu Ser Trp Pro Asn Pro Ser Pro Glu Thr Val Leu Phe Phe Ser Gly Lys Val Glu Pro Pro His Ser

Ser His Glu Asp Leu Thr Asp Gly Leu Ser Thr Arg Ser Phe Cys His

Pro	Glu	Val	Glu	Glu	Glu	Pro	His	Glu	Arg	Asp	Ala	Leu	Leu	Ala	Gly
		115					120					125			
Ser	Leu	Asn	Asn	Thr	Leu	His	Leu	Ser	Asn	Glu	Gln	Glu	Arg	Gly	Asp
	130					135					140				
Trp	Pro	Gly	Glu	Ala	Pro	Lys	Pro	Pro	Glu	Pro	Tyr	Ser	His	His	Lys
145					150					155					160
Ala	His	Gly	Arg	Ser	Lys	His	Pro	Ser	Gly	Ser	Asn	Thr	Gln	Pro	Gly
				165					170					175	
Met	Glu	Ser	Asp	Pro	Tyr	Glu	Ala	Glu	Asp	Phe	Val	Cys	Asp	Tyr	His
			180					185					190		
Leu	Glu	Met	Leu	Ser	Leu	Ser	Gln	Asp	Gln	Gln	Asn	Pro	Ser	Cys	Ile
		195					200					205			
Gln	Phe	Asp	Asp	Ser	Asn	Trp	Gln	Leu	His	Leu	Thr	Ser	Leu	Lys	Pro
	210					215					220				
Leu	Gly	Leu	Asn	Val	Leu	Leu	Asn	Leu	Cys	Asp	Ala	Ser	Val	Thr	Glu
225					230					235					240
Arg	Leu	Cys	Arg	Phe	Ser	Asp	His	Leu	Cys	Asn	Ile	Ala	Leu	Gln	Glu
				245					250					255	
Ser	His	Ser	Ala	Val	Leu	Pro	Val	His	Val	Pro	Trp	Gly	Leu	Cys	Glu
			260					265					270		
Leu	Ala	Arg	Leu	Ile	Gly	Phe	Thr	Pro	Gly	Ala	Lys	Glu	Leu	Phe	Lys
		275					280					285			
Gln	Glu	Asn	His	Leu	Ala	Leu	Tyr	Arg	Leu	Pro	Ser	Ala	Glu	Thr	Met
	290					295					300				
Lys	Glu	Thr	Ser	Leu	Gly	Arg	Leu	Ser	Cys	Val	Thr	Lys	Arg	Arg	Pro
305					310					315					320
Pro	Leu	Ser	His	Met	Ile	Ser	Leu	Phe	Ile	Lys	Asp	Thr	Thr	Thr	Ser
				325					330					335	
Thr	Glu	Gln	Met	Leu	Ser	His	Glv	Thr	Ala	Asp	Val	Val	Leu	Glu	Ala

Cys Thr Asp Phe Trp Asp Gly Ala Asp Ile Tyr Pro Leu Ser Gly Ser Asp Arg Lys Lys Val Leu Asp Phe Tyr Gln Arg Ala Cys Leu Ser Gly Tyr Cys Ser Ala Phe Ala Tyr Lys Pro Met Asn Cys Ala Leu Ser Ser Gln Leu Asn Gly Lys Cys Ile Glu Leu Val Gln Val Pro Gly Gln Ser Ser Ile Phe Thr Met Cys Glu Leu Pro Ser Thr Ile Pro Ile Lys Gln Asn Ala Arg Arg Ser Ser Trp Ser Ser Asp Glu Gly Ile Gly Glu Val Leu Glu Lys Glu Asp Cys Met Gln Ala Leu Ser Gly Gln Ile Phe Met Gly Met Val Ser Ser Gln Tyr Gln Ala Arg Leu Asp Ile Val Arg Leu Ile Asp Gly Leu Val Asn Ala Cys Ile Arg Phe Val Tyr Phe Ser Leu Glu Asp Glu Leu Lys Ser Lys Val Phe Ala Glu Lys Asn Gly Pro Gly Asp Arg Leu Glu Leu Pro His Leu Pro His Thr Gln Trp

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<212> PRT

<213> Homo sapiens

<400> 3700 Met Gln His Pro Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu Lys Pro Leu Phe Lys Ser Thr Ser Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu Lys His Gly Ala Ala Thr Gly Val Asp Ala Ile Cys Thr Leu Arg Leu Asp Pro Thr Gly Pro Gly Leu Asp Arg Glu Trp Leu Tyr Trp Glu Leu Ser Gln Leu Thr Asn Ser Val Thr Glu Leu Gly Pro Tyr Thr Leu Asp Arg Asp Ser Leu Tyr Val Asn Gly Phe Thr His Arg Ser Ser Val Pro Thr Thr Ser Ile Pro Gly Thr Ser Ala Val His Leu Glu Thr Ser Gly Thr Pro Ala Ser Leu Pro Gly His Thr Ala Pro Gly Pro Leu Leu Val Pro Phe Thr Leu Asn Phe Thr Ile Thr Asn Leu Gln Tyr Glu Glu Asp Met Arg His Pro Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu Lys Pro Leu Phe Lys Ser Thr Ser Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu Lys Arg Gly Ala Ala Thr Gly Val

Asp Thr Ile Cys Thr His Arg Leu Asp Pro Leu Asn Pro Gly Leu Asp

	210					215					220				
Arg	Glu	Gln	Leu	Tyr	Trp	Glu	Leu	Ser	Lys	Leu	Thr	His	Gly	Ile	Ile
225					230					235					240
Glu	Leu	Gly	Pro	Tyr	Leu	Leu	Asp	Arg	Gly	Ser	Leu	Tyr	Val	Asn	Gly
				245					250					255	
Phe	Thr	His	Arg	Asn	Phe	Val	Pro	Ile	Thr	Ser	Thr	Pro	Gly	Thr	Ser
			260					265					270		
Thr	Val	His	Leu	Gly	Thr	Ser	Glu	Thr	Pro	Ser	Ser	Leu	Pro	Arg	Pro
		275					280					285			
Ile	Val	Pro	Gly	Pro	Leu	Leu	Val	Pro	Phe	Thr	Leu	Asn	Phe	Thr	Ile
	290					295					300				
Thr	Asn	Leu	Gln	Tyr	Glu	Glu	Ala	Met	Arg	His	Pro	Gly	Ser	Arg	Lys
305					310					315					320
Phe	Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	Arg	Pro	Leu	Phe
				325					330					335	
Lys	Asn	Thr	Ser	Ile	Gly	Pro	Leu	Tyr	Ser	Ser	Cys	Arg	Leu	Thr	Leu
			340					345					350		
Leu	Arg	Pro	Glu	Lys	Asp	Lys	Ala	Ala	Thr	Arg	Val	Asp	Ala	Ile	Cys
		355					360					365			
Thr	His	His	Pro	Asp	Pro	Gln	Ser	Pro	Gly	Leu	Asn	Arg	Glu	Gln	Leu
	370					375					380				
Tyr	Trp	Glu	Leu	Ser	Gln	Leu	Thr	His	Gly	Ile	Thr	Glu	Leu	Gly	Pro
385					390					395					400
Tyr	Thr	Leu	Asp	Arg	Asp	Ser	Leu	Tyr	Val	Asp	Gly	Phe	Thr	His	Trp
				405					410					415	
Ser	Pro	Ile	Pro	Thr	Thr	Ser	Thr	Thr	Gly	Pro	Leu	Leu	Met	Pro	Phe
			420					425					430		
Thr	Leu	Asn	Phe	Thr	Ile	Thr	Asn	Leu	Gln	Tyr	Glu	Glu	Asn	Met	Gly
		435					440					445			

His	Pro	Gly	Ser	Arg	Lys	Phe	Asn	He	Thr	Glu	Ser	Val	Leu	Gln	Gly
	450					455					460				
Leu	Leu	Lys	Pro	Leu	Phe	Lys	Ser	Thr	Ser	Val	Gly	Pro	Leu	Tyr	Ser
465					470					475					480
Gly	Cys	Arg	Leu	Thr	Leu	Leu	Arg	Pro	Glu	Lys	Asp	Gly	Val	Ala	Thr
				485					490					495	
Arg	Val	Asp	Ala	Ile	Cys	Thr	His	Arg	Pro	Asp	Pro	Lys	Ile	Pro	Gly
			500					505					510		
Leu	Asp	Arg	Gln	Gln	Leu	Tyr	Trp	Glu	Leu	Ser	Gln	Leu	Thr	His	Ser
		515					520					525			
Ile	Thr	Glu	Leu	Gly	Pro	Tyr	Thr	Leu	Asp	Arg	Asp	Ser	Leu	Tyr	Val
	530					535					540				
Asn	Gly	Phe	Thr	Gln	Arg	Ser	Ser	Val	Pro	Thr	Thr	Ser	Thr	Pro	Gly
545					550					555					560
Thr	Phe	Thr	Val	Gln	Pro	Glu	Thr	Ser	Glu	Thr	Pro	Ser	Ser	Leu	Pro
				565					570					575	
Gly	Pro	Thr	Ala	Thr	Gly	Pro	Val	Leu	Leu	Pro	Phe	Thr	Leu	Asn	Phe
			580					585					590		
Thr	Ile	Thr	Asn	Leu	Gln	Tyr	Glu	Glu	Asp	Met	His	Arg	Pro	Gly	Ser
		595					600					605			
Arg	Lys	Phe	Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	Met	Pro
	610					615					620				
Leu	Phe	Lys	Asn	Thr	Ser	Val	Ser	Ser	Leu	Tyr	Ser	Gly	Cys	Arg	Leu
625					630					635					640
Thr	Leu	Leu	Arg	Pro	Glu	Lys	Asp	Gly	Ala	Ala	Thr	Arg	Val	Asp	Ala
				645					650					655	
Val	Cys	Thr	His	Arg	Pro	Asp	Pro	Lys	Ser	Pro	Gly	Leu	Asp	Arg	Glu
			660					665					670		
Arg	Leu	Tyr	Trp	Lys	Leu	Ser	Gln	Leu	Thr	His	Gly	Ile	Thr	Glu	Leu

		675					680					685			
Gly	Pro	Tyr	Thr	Leu	Asp	Arg	His	Ser	Leu	Tyr	Val	Asn	Gly	Phe	Thr
	690					695					700				
His	Gln	Ser	Ser	Met	Thr	Thr	Thr	Arg	Thr	Pro	Asp	Thr	Ser	Thr	Met
705					710					715					720
His	Leu	Ala	Thr	Ser	Arg	Thr	Pro	Ala	Ser	Leu	Ser	Gly	Pro	Thr	Thr
				725					730					735	
Ala	Ser	Pro	Leu	Leu	Val	Leu	Phe	Thr	Ile	Asn	Phe	Thr	Ile	Thr	Asn
			740					745					750		
Leu	Arg	Tyr	Glu	Glu	Asn	Met	His	His	Pro	Gly	Ser	Arg	Lys	Phe	Asn
		755					760					765			
Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	Arg	Pro	Val	Phe	Lys	Asn
	770					775					780				
Thr	Ser	Val	Gly	Pro	Leu	Tyr	Ser	Gly	Cys	Arg	Leu	Thr	Leu	Leu	Arg
785					790					795					800
Pro	Lys	Lys	Asp	Gly	Ala	Ala	Thr	Lys	Val	Asp	Ala	Ile	Cys	Thr	Tyr
				805					810					815	
Arg	Pro	Asp	Pro	Lys	Ser	Pro	Gly	Leu	Asp	Arg	Glu	Gln	Leu	Tyr	Trp
			820					825					830		
Glu	Leu	Ser	Gln	Leu	Thr	His	Ser	Ile	Thr	Glu	Leu	Gly	Pro	Tyr	Thr
		835					840					845			
Leu	Asp	Arg	Asp	Ser	Leu	Tyr	Val	Asn	Gly	Phe	Thr	Gln	Arg	Ser	Ser
	850					855					860				
Val	Pro	Thr	Thr	Ser	Ile	Pro	Gly	Thr	Pro	Thr	Val	Asp	Leu	Gly	Thr
865					870					875					880
Ser	Gly	Thr	Pro	Val	Ser	Lys	Pro	Gly	Pro	Ser	Ala	Ala	Ser	Pro	Leu
				885					890					895	
Leu	Val	Leu	Phe	Thr	Leu	Asn	Phe	Thr	Ile	Thr	Asn	Leu	Arg	Tyr	Glu
			900					905					910		

Glu	Asn	Met	Gln	His	Pro	Gly	Ser	Arg	Lys	Phe	Asn	Thr	Thr	Glu	Arg
		915					920					925			
Val	Leu	Gln	Gly	Leu	Leu	Arg	Ser	Leu	Phe	Lys	Ser	Thr	Ser	Val	Gly
	930					935					940				
Pro	Leu	Tyr	Ser	Gly	Cys	Arg	Leu	Thr	Leu	Leu	Arg	Pro	Glu	Lys	Asp
945					950					955					960
Gly	Thr	Ala	Thr	Gly	Val	Asp	Ala	Ile	Cys	Thr	His	His	Pro	Asp	Pro
				965					970					975	
Lys	Ser	Pro	Arg	Leu	Asp	Arg	Glu	Gln	Leu	Tyr	Trp	Glu	Leu	Ser	Gln
			980					985		-			990		
Leu	Thr	His	Asn	Ile	Thr	Glu	Leu	Gly	Pro	Tyr	Ala	Leu	Asp	Asn	Asp
		995				-	1000					1005			
Ser	Leu	Phe	Val	Asn	Gly	Phe	Thr	His	Arg	Ser	Ser	Val	Ser	Thr	Thr
-	1010]	1015					1020				
Ser	Thr	Ala	Ser	His	Leu	Leu	Ile	Leu	Phe	Thr	Leu	Asn	Phe	Thr	Ile
1025	5				1030				-	1035					1040
Thr	Asn	Leu	Arg	Tyr	Glu	Glu	Asn	Met	Trp	Pro	Gly	Ser	Arg	Lys	Phe
				1045					1050					1055	
Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	Arg	Pro	Leu	Phe	Lys
			1060					1065					1070		
Asn	Thr	Ser	Val	Gly	Pro	Leu	Tyr	Ser	Gly	Cys	Arg	Leu	Thr	Leu	Leu
		1075					1080					1085			
Arg	Pro	Glu	Lys	Asp	Gly	Glu	Ala	Thr	Gly	Val	Asp	Ala	Ile	Cys	Thr
	1090				•	1095					1100				
His	Arg	Pro	Asp	Pro	Thr	Gly	Pro	Gly	Leu	Asp	Arg	Glu	Gln	Leu	Tyr
1109	5				1110					1115					1120
Leu	Glu	Leu	Ser	Gln	Leu	Thr	His	Ser	Ile	Thr	Glu	Leu	Gly	Pro	Tyr
				1125					1130					1135	
Thr	Len	Aen	Ara	Asn	Ser	Len	Tur	Val	Asn	Glv	Phe	Thr	His	Aro	Ser

]	140			1145					1150				
Ser	Val	Pro	Thr	Thr	Ser	Thr	Gly	Val	Val	Ser	Glu	Glu	Pro	Phe	Thr
]	1155					1160]	1165			
Leu .	Asn	Phe	Thr	Ile	Asn	Asn	Leu	Arg	Tyr	Met	Ala	Asp	Met	Gly	Gln
1	170]	1175					1180				
Pro	Gly	Ser	Leu	Lys	Phe	Asn	Ile	Thr	Asp	Asn	Val	Met	Lys	His	Leu
1185				-	190]	1195					1200
Leu	Ser	Pro	Leu	Phe	Gln	Arg	Ser	Ser	Leu	Gly	Ala	Arg	Tyr	Thr	Gly
			-	1205					1210					1215	
Cys .	Arg	Val	Ile	Ala	Leu	Arg	Ser	Val	Lys	Asn	Gly	Ala	Glu	Thr	Arg
]	1220					1225					1230		
Val	Asp	Leu	Leu	Cys	Thr	Tyr	Leu	Gln	Pro	Leu	Ser	Gly	Pro	Gly	Leu
]	1235					1240					1245			
Pro	Ile	Lys	Gln	Val	Phe	His	Glu	Leu	Ser	Gln	Gln	Thr	His	Gly	Ile
1	250					1255				-	1260				
Thr	Arg	Leu	Gly	Pro	Tyr	Ser	Leu	Asp	Lys	Asp	Ser	Leu	Tyr	Leu	Asn
1265				-	1270					1275				-	1280
Gly	Tyr	Asn	Glu	Pro	Gly	Pro	Asp	Glu	Pro	Pro	Thr	Thr	Pro	Lys	Pro
				1285				-	1290					1295	
Ala	Thr	Thr	Phe	Leu	Pro	Pro	Leu	Ser	Glu	Ala	Thr	Thr	Ala	Met	Gly
			1300				-	1305					1310		
Tyr	His	Leu	Lys	Thr	Leu	Thr	Leu	Asn	Phe	Thr	Ile	Ser	Asn	Leu	Gln
		1315					1320					1325			
Tyr	Ser	Pro	Asp	Met	Gly	Lys	Gly	Ser	Ala	Thr	Phe	Asn	Ser	Thr	Glu
1	330					1335				•	1340				
Gly	Val	Leu	Gln	His	Leu	Leu	Arg	Pro	Leu	Phe	Gln	Lys	Ser	Ser	Met
1345	•				1350				-	1355					1360
Gly	Pro	Phe	Tyr	Leu	Gly	Cys	Gln	Leu	Ile	Ser	Leu	Arg	Pro	Glu	Lys
				1365					1370					1375	

Asp Gly	Ala	Ala	Thr	Gly	Val	Asp	Thr	Thr	Cys	Thr	Tyr	His	Pro	Asp
	1	380]	1385]	1390		
Pro Val	Gly	Pro	Gly	Leu	Asp	Ile	Gln	Gln	Leu	Tyr	Trp	Glu	Leu	Ser
13	395]	1400]	1405			
Gln Leu '	Thr	His	Gly	Val	Thr	Gln	Leu	Gly	Phe	Tyr	Val	Leu	Asp	Arg
1410]	1415]	420				
Asp Ser	Leu	Phe	Ile	Asn	Gly	Tyr	Ala	Pro	Gln	Asn	Leu	Ser	Ile	Arg
1425]	1430					1435				J	1440
Gly Glu	Tyr	Gln	Ile	Asn	Phe	His	Ile	Val	Asn	Trp	Asn	Leu	Ser	Asn
]	1445]	1450]	1455	
Pro Asp	Pro	Thr	Ser	Ser	Glu	Tyr	Ile	Thr	Leu	Leu	Arg	Asp	Ile	Gln
]	1460				-	1465					1470		
Asp Lys	Val	Thr	Thr	Leu	Tyr	Lys	Gly	Ser	Gln	Leu	His	Asp	Thr	Phe
1	475					1480					1485			
Arg Phe	Cys	Leu	Val	Thr	Asn	Leu	Thr	Met	Asp	Ser	Val	Leu	Val	Thr
1490				-	1495					1500				
Val Lys	Ala	Leu	Phe	Ser	Ser	Asn	Leu	Asp	Pro	Ser	Leu	Val	Glu	Gln
1505			-	1510					1515]	1520
Val Phe	Leu	Asp	Lys	Thr	Leu	Asn	Ala	Ser	Phe	His	Trp	Leu	Gly	Ser
			1525					1530					1535	
Thr Tyr	Gln	Leu	Val	Asp	Ile	His	Val	Thr	Glu	Met	Glu	Ser	Ser	Val
]	1540					1545					1550		
Tyr Gln	Pro	Thr	Ser	Ser	Ser	Ser	Thr	Gln	His	Phe	Tyr	Leu	Asn	Phe
1	555					1560					1565			
Thr Ile	Thr	Asn	Leu	Pro	Tyr	Ser	Gln	Asp	Lys	Ala	Gln	Pro	Gly	Thr
1570				:	1575					1580				
Thr Asn	Tyr	Gln	Arg	Asn	Lys	Arg	Asn	Ile	Glu	Asp	Ala	Val	Arg	Arg
1585				1590					1595					1600
Gly Cys	Ser	Thr	Aen	Ser	Ser	Glu	Thr	Ala	Ala	Ser	Arg	Val	He	Phe

1605 1610 1615

Leu Thr Val Lys Phe Gln His Ser Gly Leu Ser Pro Thr Gly Thr Thr
1620 1625 1630

Pro Gly Trp Thr Pro Cys Val Thr Ser Arg His Trp Leu Gly Glu 1635 1640 1645

<210> 3701

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3701

Met Thr Ala Phe Gly Gly Ser Ala Thr Val Ala Val Trp Thr Gly Ile

1 5 10 15

Leu Phe Phe His Ser Cys Ser Met Cys Pro Leu Ala Met Leu Ser Ala
20 25 30

His Leu Lys Glu Ile Phe Ser Asp Gly Gly Cys Ser Trp Trp Arg Pro 35 40 45

Trp Gly Asn Leu Pro Pro Lys Ser Gln Gly Val Ser Gly Thr Thr Cys
50 55 60

Cys Gly Trp Ala Ser Ser Leu Val Leu Leu Ser Leu Phe Pro Cys Pro
65 70 75 80

Gly Gln Pro Val Arg Ser Gln Asn Gly Ser Arg Gln Arg Glu Ala Ser 85 90 95

Val Gln Arg Ala Met Glu Ser Gly Val Met Glu His Ser Ala Cys Arg 100 105 110

Ala Ala Val Phe Pro Ser Leu

<210> 3702 <211> 386 <212> PRT <213> Homo sapiens <400> 3702 Met Asn Glu Pro Thr Glu Asn Arg Leu Gly Cys Ser Arg Thr Pro Glu Pro Asp Ile Arg Leu Arg Lys Gly His Gln Leu Asp Gly Thr Arg Arg Gly Asp Asn Asp Ser His Gln Gly Asp Leu Glu Pro Ile Leu Glu Ala Ser Val Leu Ser Ser His His Lys Lys Ser Ser Glu Glu His Glu Tyr Ser Asp Glu Ala Pro Gln Glu Asp Glu Gly Phe Met Gly Met Ser Pro Leu Leu Gln Ala His His Ala Met Glu Lys Met Glu Glu Phe Val Cys Lys Val Trp Glu Gly Arg Trp Arg Val Ile Pro His Asp Val Leu Pro

Asp Trp Leu Lys Asp Asn Asp Phe Leu Leu His Gly His Arg Pro Pro

Met Pro Ser Phe Arg Ala Cys Phe Lys Ser Ile Phe Arg Ile His Thr

Glu Thr Gly Asn Ile Trp Thr His Leu Leu Gly Cys Val Phe Phe Leu

Cys Leu Gly Ile Phe Tyr Met Phe Arg Pro Asn Ile Ser Phe Val Ala

				165					170					175	
Pro	Leu	Gln	Glu	Lys	Val	Val	Phe	Gly	Leu	Phe	Phe	Leu	Gly	Ala	Ile
			180					185					190		
Leu	Cys	Leu	Ser	Phe	Ser	Trp	Leu	Phe	His	Thr	Val	Tyr	Cys	His	Ser
		195					200					205			
Glu	Gly	Val	Ser	Arg	Leu	Phe	Ser	Lys	Leu	Asp	Tyr	Ser	Gly	Ile	Ala
	210					215					220				
Leu	Leu	Ile	Met	Gly	Ser	Phe	Val	Pro	Trp	Leu	Tyr	Tyr	Ser	Phe	Tyr
225					230					235					240
Cys	Asn	Pro	Gln	Pro	Cys	Phe	Ile	Tyr	Leu	Ile	Val	Ile	Cys	Val	Leu
				245					250					255	
Gly	Ile	Ala	Ala	Ile	Ile	Val	Ser	Gln	Trp	Asp	Met	Phe	Ala	Thr	Pro
			260					265					270		
Gln	Tyr	Arg	Gly	Val	Arg	Ala	Gly	Val	Phe	Leu	Gly	Leu	Gly	Leu	Ser
		275					280					285			
Gly	Ile	Ile	Pro	Thr	Leu	His	Tyr	Val	Ile	Ser	Glu	Gly	Phe	Leu	Lys
	290					295					300				
Ala	Ala	Thr	Ile	Gly	Gln	Ile	Gly	Trp	Leu	Met	Leu	Met	Ala	Ser	Leu
305					310					315					320
Tyr	Ile	Thr	Gly	Ala	Ala	Leu	Tyr	Ala	Ala	Arg	Ile	Pro	Glu	Arg	Phe
				325					330					335	
Phe	Pro	Gly	Lys	Cys	Asp	Ile	Trp	Phe	His	Ser	His	Gln	Leu	Phe	His
			340					345					350		
Ile	Phe	Val	Val	Ala	Gly	Ala	Phe	Val	His	Phe	His	Gly	Val	Ser	Asn
		355					360					365			
Leu	Gln	Glu	Phe	Arg	Phe	Met	Ile	Gly	Gly	Gly	Cys	Ser	Glu	Glu	Asp
	370					375					380				
Ala	Leu														
385															

<210> 3703

<211> 705

<212> PRT

<213> Homo sapiens

<400> 3703

Met Phe Met Phe Cys Glu Trp Ala Phe Leu Ser Gly Ala Ala Leu Ser

1 5 10 15

Ser Leu Asp Lys Glu Gly Leu Ser Ala Leu Ser Trp Ala Cys Leu Lys
20 25 30

Gly His Arg Ala Val Val Gln Tyr Leu Val Glu Glu Gly Ala Ala Ile 35 40 45

Asp Gln Thr Asp Lys Asn Gly Arg Thr Pro Leu Asp Leu Ala Ala Phe 50 55 60

Tyr Gly Asp Ala Glu Thr Val Leu Tyr Leu Val Glu Lys Gly Ala Val 65 70 75 80

Ile Glu His Val Asp His Ser Gly Met Arg Pro Leu Asp Arg Ala Ile

85 90 95

Gly Cys Arg Asn Thr Ser Val Val Val Ala Leu Leu Arg Lys Gly Ala 100 105 110

Lys Leu Gly Asn Ala Ala Trp Ala Met Ala Thr Ser Lys Pro Asp Ile 115 120 125

Leu Ile Ile Leu Leu Gln Lys Leu Met Glu Glu Gly Asn Val Met Tyr 130 135 140

Arg Lys Phe Pro Arg Glu Gly Phe Gly Glu Asp Met Arg Pro Phe Asn

				165					170					175		
Glu	Leu	Arg	Val	Ser	Leu	Tyr	Leu	Asn	Leu	Ser	Arg	Cys	Arg	Arg	Lys	
			180					185					190			
Thr	Asn	Asp	Phe	Gly	Met	Ala	Glu	Glu	Phe	Ala	Ser	Lys	Ala	Leu	Glu	
		195					200					205				
Leu	Lys	Pro	Lys	Ser	Tyr	Glu	Ala	Phe	Tyr	Ala	Arg	Ala	Arg	Ala	Lys	
	210					215					220					
Arg	Asn	Ser	Arg	Gln	Phe	Val	Ala	Ala	Leu	Ala	Asp	Leu	Gln	Glu	Ala	
225					230					235					240	
Val	Lys	Leu	Cys	Pro	Thr	Asn	Gln	Glu	Val	Lys	Arg	Leu	Leu	Ala	Arg	
				245					250					255		
Val	Glu	Glu	Glu	Cys	Lys	Gln	Leu	Gln	Arg	Ser	Gln	Gln	Gln	Lys	Gln	
			260					265					270			
Gln	Gly	Pro	Leu	Pro	Ala	Pro	Leu	Asn	Asp	Ser	Glu	Asn	Glu	Glu	Asp	
		275					280					285				
Thr	Pro	Thr	Pro	Gly	Leu	Ser	Asp	His	Phe	His	Ser	Glu	Glu	Thr	Glu	
	290					295					300					
Glu	Glu	Glu	Thr	Ser	Pro	Gln	Glu	Glu	Ser	Val	Ser	Pro	Thr	Pro	Arg	
305					310					315					320	
Ser	Gln	Pro	Ser	Ser	Ser	Val	Pro	Ser	Ser	Tyr	Ile	Arg	Asn	Leu	Gln	
				325					330					335		
Glu	Gly	Leu	Gln	Ser	Lys	Gly	Arg	Pro	Val	Ser	Pro	Gln		Arg	Ala	
			340					345					350			
Gly	Ile		Lys	Ser	Leu	Arg		Pro	Val	Ala	Gln		Gly	Leu	Leu	
		355					360					365				
Leu		Pro	Ser	Lys	Gln		Gln	Ile	Val	Lys		Ser	Gln	His	Leu	
	370			_		375				_	380	_				
	Ser	Gly	Gln	Ser	Ala	Val	Arg	Asn	Gly		Met	Lys	Val	Gln		
385					390					395					400	

Ser	Ser	Gln	Asn	Pro	Pro	Pro	Ser	Pro	Met	Pro	Gly	Arg	Ile	Ala	Ala
				405					410					415	
Thr	Pro	Ala	Gly	Ser	Arg	Thr	Gln	His	Leu	Glu	Gly	Thr	Gly	Thr	Phe
			420					425					430		
Thr	Thr	Arg	Ala	Gly	Cys	Gly	His	Phe	Gly	Asp	Arg	Leu	Gly	Pro	Ser
		435					440					445			
Gln	Asn	Val	Arg	Leu	Gln	Cys	Gly	Glu	Asn	Gly	Pro	Ala	His	Pro	Leu
	450		•			455					460				
Pro	Ser	Lys	Thr	Lys	Thr	Thr	Glu	Arg	Leu	Leu	Ser	His	Ser	Ser	Val
465					470					475					480
Ala	Val	Asp	Ala	Ala	Pro	Pro	Asn	Gln	Gly	Gly	Leu	Ala	Thr	Cys	Ser
				485					490					495	
Asp	Val	Arg	His	Pro	Ala	Ser	Leu	Thr	Ser	Ser	Gly	Ser	Ser	Gly	Ser
			500					505					510		
Pro	Ser	Ser	Ser	Ile	Lys	Met	Ser	Ser	Ser	Thr	Ser	Ser	Leu	Thr	Ser
		515					520					525			
Ser	Ser	Ser	Phe	Ser	Asp	Gly	Phe	Lys	Val	Gln	Gly	Pro	Asp	Thr	Arg
	530					535					540				
Ile	Lys	Asp	Lys	Val	Val	Thr	His	Val	Gln	Ser	Gly	Thr	Ala	Glu	His
545					550					555					560
Arg	Pro	Arg	Asn	Thr	Pro	Phe	Met	Gly	Ile	Met	Asp	Lys	Thr	Ala	Arg
				565					570					575	
Phe	Gln	Gln	Gln	Ser	Asn	Pro	Pro	Ser	Arg	Ser	Trp	His	Cys	Pro	Ala
			580					585					590		
Pro	Glu	Gly	Leu	Leu	Thr	Asn	Thr	Ser	Ser	Ala	Ala	Gly	Leu	Gln	Ser
		595					600					605			
Ala	Asn	Thr	Glu	Lys	Pro	Ser	Leu	Met	Gln	Val	Gly	Gly	Tyr	Asn	Asn
	610					615					620				
Gln	Ala	I 170	Thr	Care	Ser	Val	Ser	Thr	Leu	Ser	Ala	Ser	Val	His	Asr

Gly Ala Gln Val Lys Glu Leu Glu Glu Ser Lys Cys Gln Ile Pro Val His Ser Gln Glu Asn Arg Ile Thr Lys Thr Val Ser His Leu Tyr Gln Glu Ser Ile Ser Lys Gln Gln Pro His Ile Ser Asn Glu Ala His Arg Ser His Leu Thr Ala Ala Lys Pro Lys Arg Ser Phe Ile Glu Ser Asn Val <210> 3704 <211> 157

<212> PRT <213> Homo sapiens

<400> 3704 Met Ala Ile Ile Lys Lys Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu Ser His Cys Trp Trp Asp Cys Lys Leu Val Gln Pro Leu Trp Lys Ser Val Trp Arg Phe Leu Arg Asp Leu Glu Leu Glu Thr Pro Phe Asp Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys Ser Cys Cys Tyr Lys Asp Thr Cys Thr Arg Met Phe Ile

Val Ala Leu Phe Thr Ile Ala Lys Thr Trp Asn Gln Pro Lys Cys Pro 85 90 95

Thr Met Ile Asp Trp Ile Lys Lys Thr Trp His Ile Tyr Thr Met Glu
100 105 110

Tyr Tyr Ala Ala Ile Lys Asn Asp Glu Phe Met Ser Phe Val Gly Thr
115 120 125

Trp Met Lys Leu Glu Ile Ile Ile Leu Ser Lys Leu Ser Gln Glu Gln
130 135 140

Lys Thr Lys His Arg Ile Phe Ser Leu Ile Gly Gly Asn 145 150 155

<210> 3705

<211> 383

<212> PRT

<213> Homo sapiens

<400> 3705

Met Arg Lys Ile Glu Ala Trp His Ser Gln Met Ala Cys Ser Gly Tyr

1 5 10 15

Leu Leu Val Gly Thr Gly Ala Asn Ile Glu Val Trp Ser Tyr Ile Ser
20 25 30

Leu Pro Gln Val Leu Pro Ile Leu Pro Leu Cys Ile Val Pro Phe Phe
35 40 45

Pro His Ser Leu Cys Pro Ser Tyr Asn Ile Cys Glu Asp Cys Glu Ala
50 55 60

Gly Pro Tyr Gly His Asp Thr Asn His Val Leu Leu Lys Leu Arg Arg
65 70 75 80

Pro Val Val Gly Ser Ser Glu Pro Phe Cys His Ser Lys Tyr Ser Thr

				85					90					95	
Pro	Arg	Leu	Pro	Ala	Ala	Leu	Glu	Gln	Val	Arg	Leu	Gln	Lys	Gln	Val
			100					105					110		
Asp	Lys	Asn	Phe	Leu	Lys	Ala	Glu	Lys	Gln	Arg	Leu	Arg	Ala	Glu	Lys
		115					120					125			
Lys	Gln	Arg	Lys	Ala	Glu	Val	Lys	Glu	Leu	Lys	Lys	Gln	Leu	Lys	Leu
	130					135					140				
His	Arg	Lys	Ile	His	Leu	Trp	Asn	Ser	Ile	His	Gly	Leu	Gln	Ser	Pro
145					150					155					160
Lys	Ser	Pro	Leu	Gly	Arg	Pro	Glu	Ser	Leu	Leu	Gln	Ser	Asn	Thr	Leu
				165					170					175	
Met	Leu	Pro	Leu	Gln	Pro	Cys	Thr	Ser	Val	Met	Pro	Met	Leu	Ser	Ala
			180					185					190		
Ala	Phe	Val	Asp	Glu	Asn	Leu	Pro	Asp	Gly	Thr	His	Leu	Gln	Pro	Gly
		195					200					205			
Thr	Lys	Phe	Ile	Lys	His	Trp	Arg	Met	Lys	Asn	Thr	Gly	Asn	Val	Lys
	210					215					220				
Trp	Ser	Ala	Asp	Thr	Lys	Leu	Lys	Phe	Met	Trp	Gly	Asn	Leu	Thr	Leu
225					230					235					240
Ala	Ser	Thr	Glu	Lys	Lys	Asp	Val	Leu	Val	Pro	Cys	Leu	Lys	Ala	Gly
				245					250					255	
His	Val	Gly	Val	Val	Ser	Val	Glu	Phe	Ile	Ala	Pro	Ala	Leu	Glu	Gly
			260					265					270		
Thr	Tyr	Thr	Ser	His	Trp	Arg	Leu	Ser	His	Lys	Gly	Gln	Gln	Phe	Gly
		275					280					285			
Pro	Arg	Val	Trp	Cys	Ser	Ile	Ile	Val	Asp	Pro	Phe	Pro	Ser	Glu	Glu
	290					295					300				
Ser	Pro	Asp	Asn	Ile	Glu	Lys	Gly	Met	Ile	Ser	Ser	Ser	Lys	Thr	Asp
305					310					315					320

Asp Leu Thr Cys Gln Gln Glu Glu Thr Phe Leu Leu Ala Lys Glu Glu 325 335

Arg Gln Leu Gly Glu Val Thr Glu Gln Thr Glu Gly Thr Ala Ala Cys 340 345 355

Ile Pro Gln Lys Ala Lys Asn Val Ala Ser Glu Arg Glu Leu Tyr Ile 355 360 365

Pro Ser Val Asp Leu Leu Thr Ala Gln Val Glu Asp Ser Ala Leu

375

380

<210> 3706

370

<211> 411

<212> PRT

<213> Homo sapiens

<400> 3706

Met Ala Pro Asn Leu Asp Ser Phe Gly Arg Asp Arg Ala Leu Tyr Gln

1 5 10 15

Glu His Ala Lys Arg Arg Ile Ala Glu Arg Glu Ala Arg Arg Thr Arg
20 25 30

Arg Arg Gln Ala Arg Glu Gln Thr Gly Lys Met Ala Asp His Leu Glu
35 40 45

Gly Leu Ser Ser Asp Asp Glu Glu Thr Ser Thr Asp Ile Thr Asn Phe
50 55 60

Asn Leu Glu Lys Asp Arg Ile Ser Lys Glu Ser Gly Lys Val Phe Glu 65 70 75 80

Asp Val Leu Glu Ser Phe Tyr Ser Ile Asp Cys Ile Lys Ser Gln Phe 85 90 95

Glu Ala Trp Arg Ser Lys Tyr Tyr Thr Ser Tyr Lys Asp Ala Tyr Ile

			100					105					110		
Gly	Leu	Cys	Leu	Pro	Lys	Leu	Phe	Asn	Pro	Leu	Ile	Arg	Leu	Gln	Leu
		115					120					125			
Leu	Thr	Trp	Thr	Pro	Leu	Glu	Ala	Lys	Cys	Arg	Asp	Phe	Glu	Asn	Met
	130					135					140				
Leu	Trp	Phe	Glu	Ser	Leu	Leu	Phe	Tyr	Gly	Cys	Glu	Glu	Arg	Glu	Gln
145					150					155					160
Glu	Lys	Asp	Asp	Val	Asp	Val	Ala	Leu	Leu	Pro	Thr	Ile	Val	Glu	Lys
				165					170					175	
Val	Ile	Leu	Pro	Lys	Leu	Thr	Val	Ile	Ala	Glu	Asn	Met	Trp	Asp	Pro
			180					185					190		
Phe	Ser	Thr	Thr	Gln	Thr	Ser	Arg	Met	Val	Gly	Ile	Thr	Leu	Lys	Leu
		195					200					205			
Ile	Asn	Gly	Tyr	Pro	Ser	Val	Val	Asn	Ala	Glu	Asn	Lys	Asn	Thr	Gln
	210					215					220				
Val	Tyr	Leu	Lys	Ala	Leu	Leu	Leu	Arg	Met	Arg	Arg	Thr	Leu	Asp	Asp
225					230					235					240
Asp	Val	Phe	Met	Pro	Leu	Tyr	Pro	Lys	Asn	Val	Leu	Glu	Asn	Lys	Asn
				245					250					255	
Ser	Gly	Pro	Tyr	Leu	Phe	Phe	Gln	Arg	Gln	Phe	Trp	Ser	Ser	Val	Lys
			260					265					270		
Leu	Leu	Gly	Asn	Phe	Leu	Gln	Trp	Tyr	Gly	Ile	Phe	Ser	Asn	Lys	Thr
		275					280					285			
Leu	Gln	Glu	Leu	Ser	Ile	Asp	Gly	Leu	Leu	Asn	Arg	Tyr	Ile	Leu	Met
	290					295					300				
Ala	Phe	Gln	Asn	Ser	Glu	Tyr	Gly	Asp	Asp	Ser	Ile	Lys	Lys	Ala	Gln
305					310					315					320
Asn	Val	Ile	Asn	Cys	Phe	Pro	Lys	Gln	Trp	Phe	Met	Asn	Leu	Lys	Gly
				325					330					335	

Glu Arg Thr Ile Ser Gln Leu Glu Asn Phe Cys Arg Tyr Leu Val His
340
345
350

Leu Ala Asp Thr Ile Tyr Arg Asn Ser Ile Gly Cys Ser Asp Val Glu
355
360

Lys Arg Asn Ala Arg Glu Asn Ile Lys Gln Ile Val Lys Leu Leu Ala

Lys Arg Asn Ala Arg Glu Asn Ile Lys Gln Ile Val Lys Leu Leu Ala 370 375 380

Ser Val Arg Ala Leu Asp His Ala Met Ser Val Ala Ser Asp His Asn 385 390 395 400

Val Lys Glu Phe Lys Ser Leu Ile Glu Gly Lys
405 410

<210> 3707

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3707

Met Ala Gly Pro Ser Leu Ala Leu Val Val Leu Ala Val Glu Gln Trp

1 5 10 15

Asp Glu Pro Val Val Pro Tyr Gly Ala Leu Glu Asn Ala Arg Ile Pro
20 25 30

Ser Ser Thr Cys Leu Arg Ser His Leu Leu Val Ala Ala Phe Val His
35 40 45

Pro Arg Gly Pro Gly Ala Arg Phe Phe Leu Ala Ser Asn Gly Ala Pro 50 55 60

Phe Leu Leu Gly Ser Gly His Cys Leu Gln Tyr Arg Phe Arg Gly Leu 65 70 75 80

Pro Ala Thr Val Met Cys Glu Ala Arg Asn Leu Arg Phe Thr Arg Ala

Glu Ser Cys Arg His Leu Trp Gly Leu Pro Gly Cys Pro

<210> 3708

<211> 581

<212> PRT

<213> Homo sapiens

<400> 3708

Met Gln Gln Val Met Leu Thr Cys Lys Gly Val Asn Arg Gly His Ala

Val Pro Ala Gly Pro Gly Arg Lys Pro Arg Pro Arg Arg Ser Ser Arg

Leu Leu Ala Gly Glu Lys His Leu Thr Arg Ser Ala Leu Leu Leu Cys

His Thr Glu Asp Gly Arg Ala Leu Glu Gly Thr Leu Ser Glu Leu Ala

Ala Glu Thr Asp Leu Pro Val Val Phe Val Lys Gln Arg Lys Ile Gly

Gly His Gly Pro Thr Leu Lys Ala Tyr Gln Glu Gly Arg Leu Gln Lys

Leu Leu Lys Met Asn Gly Pro Glu Asp Leu Pro Lys Ser Tyr Asp Tyr

Asp Leu Ile Ile Ile Gly Gly Gly Ser Gly Gly Leu Ala Ala Ala Lys

Glu Ala Ala Gln Tyr Gly Lys Lys Val Met Val Leu Val Phe Val Thr

Pro	Thr	Pro	Leu	Gly	Thr	Arg	Trp	Gly	Leu	Gly	Gly	Thr	Cys	Val	Asn
145					150					155					160
Val	Gly	Cys	Ile	Pro	Lys	Lys	Leu	Met	His	Gln	Ala	Ala	Leu	Leu	Gly
				165					170					175	
Gln	Ala	Leu	Gln	Asp	Ser	Arg	Asn	Tyr	Gly	Trp	Lys	Val	Glu	Glu	Thr
			180					185					190		
Val	Lys	His	Asp	Trp	Asp	Arg	Met	Ile	Glu	Ala	Val	Gln	Asn	His	Ile
		195					200					205			
Gly	Ser	Leu	Asn	Trp	Gly	Tyr	Arg	Val	Ala	Leu	Arg	Glu	Lys	Lys	Val
	210					215					220				
Val	Tyr	Glu	Asn	Ala	Tyr	Gly	Gln	Phe	Ile	Gly	Pro	His	Arg	Ile	Lys
225					230					235					240
Ala	Thr	Asn	Asn	Lys	Gly	Lys	Glu	Lys	Ile	Tyr	Ser	Ala	Glu	Arg	Phe
				245					250					255	
Leu	Ile	Ala	Thr	Gly	Glu	Arg	Pro	Arg	Tyr	Leu	Gly	Ile	Pro	Gly	Asp
			260					265					270		
Lys	Glu	Tyr	Cys	Ile	Ser	Ser	Asp	Asp	Leu	Phe	Ser	Leu	Pro	Tyr	Cys
		275					280					285			
Pro	Gly	Lys	Thr	Leu	Val	Val	Gly	Ala	Ser	Tyr	Val	Ala	Leu	Glu	Cys
	290					295					300				
Ala	Gly	Phe	Leu	Ala	Gly	Ile	Gly	Leu	Asp	Val	Thr	Val	Met	Val	Arg
305					310					315					320
Ser	Ile	Leu	Leu	Arg	Gly	Phe	Asp	Gln	Asp	Met	Ala	Asn	Lys	Ile	Gly
				325					330					335	
Glu	His	Met	Glu	Glu	His	Gly	Ile	Lys	Phe	Ile	Arg	Gln	Phe	Val	Pro
			340					345					350		
Ile	Lys	Val	Glu	Gln	Ile	Glu	Ala	Gly	Thr	Pro	Gly	Arg	Leu	Arg	Val
		355					360					365			
Val	Ala	Gln	Ser	Thr	Asn	Ser	Glu	Glu	Tle	Πe	Glu	Glv	Glu	Tvr	Asr

		370					375					380				
T	hr	Val	Met	Leu	Ala	Ile	Gly	Arg	Asp	Ala	Cys	Thr	Arg	Lys	Ile	Gly
3	85					390					395					400
L	eu	Glu	Thr	Val	Gly	Val	Lys	Ile	Asn	Glu	Lys	Thr	Gly	Lys	Ile	Pro
					405					410					415	
V	al	Thr	Asp	Glu	Glu	Gln	Thr	Asn	Val	Pro	Tyr	Ile	Tyr	Ala	Ile	Gly
				420					425					430		
A	sp	Ile	Leu	Glu	Asp	Lys	Val	Glu	Leu	Thr	Pro	Val	Ala	Ile	Gln	Ala
			435					440					445			
G	lу	Arg	Leu	Leu	Ala	Gln	Arg	Leu	Tyr	Ala	Gly	Ser	Thr	Val	Lys	Cys
		450					455					460				
A	sp	Tyr	Glu	Asn	Val	Pro	Thr	Thr	Val	Phe	Thr	Pro	Leu	Glu	Tyr	Gly
4	65					470					475					480
A	la	Cys	Gly	Leu	Ser	Glu	Glu	Lys	Ala	Val	Glu	Lys	Phe	Gly	Glu	Glu
					485					490					495	
A	sn	Ile	Glu	Val	Tyr	His	Ser	Tyr	Phe	Trp	Pro	Leu	Glu	Trp	Thr	Ile
				500					505					510		
P	ro	Ser	Arg	Asp	Asn	Asn	Lys	Cys	Tyr	Ala	Lys	Ile	Ile	Cys	Asn	Thr
			515					520					525			
L	ys	Asp	Asn	Glu	Arg	Val	Val	Gly	Phe	His	Val	Leu	Gly	Pro	Asn	Ala
		530					535					540				
G	lу	Glu	Val	Thr	Gln	Gly	Phe	Ala	Ala	Ala	Leu	Lys	Cys	Gly	Leu	Thr
5	45					550					555					560
L	ys	Lys	Gln	Leu	Asp	Ser	Thr	Ile	Gly	Ile	His	Pro	Val	Cys	Ala	Glu
					565					570					575	
P	he	Phe	Ser	Phe	Ile											
				580												

<210> 3709 <211> 788

<212> PRT

<213> Homo sapiens

<400> 3709

Met Gly Leu Phe Met Val Arg Pro Leu Ala Thr Glu Tyr Pro Pro Leu 1 5 10 15.

Arg Leu Thr Pro Gly His Tyr Gln Arg Ala Glu Thr Tyr Phe Phe Arg
20 25 30

Lys Asn Ser Ser Cys Trp Arg Thr Asp Pro Phe Ser His Pro Glu Phe
35 40 45

Gln Asp Ser Cys Gly Cys Leu Lys Cys Pro Asn Arg Ser Ala Ser Ala
50 55 60

Pro Tyr Leu Thr Asn His Leu Gly His Thr Leu Leu Asn Leu Ser Gly
65 70 75 80

Phe Asn Met Glu Glu Tyr Leu Leu Ala Pro Ser Glu Lys Pro Arg Leu

85 90 95

Gly Gly Trp Ser Phe Gly Leu Lys Ile Pro Ser Glu Ala Gly Gly Ala 100 105 110

Asn Gly Asn Ile Ser Lys Pro Pro Thr Leu Ala Lys Val Trp Tyr Asn 115 120 125

Gln Lys Gly Phe His Ser Leu Pro Ser Tyr Leu Asn His Leu Asn Asn 130 135 140

Leu Ile Leu Trp Gln His Leu Pro Pro Thr Val Asp Trp Arg Gln Tyr 145 150 155 160

Gly Ile Thr Leu Tyr Ser His Pro Tyr Gly Gly Ala Leu Leu Asn Glu 165 170 175

Asp Lys Ile Leu Glu Ser Ile Arg Gln Cys Gly Val Ala Leu Cys Ile

			180					185					190		
Val	Leu	Gly	Phe	Ser	Ile	Leu	Ser	Ala	Ser	Ile	Gly	Ser	Ser	Val	Val
		195					200					205			
Arg	Asp	Arg	Val	Ile	Gly	Ala	Lys	Arg	Leu	Gln	His	Ile	Ser	Gly	Leu
	210					215					220				
Gly	Tyr	Arg	Met	Tyr	Trp	Phe	Thr	Asn	Phe	Leu	Tyr	Asp	Met	Leu	Phe
225					230					235					240
Tyr	Leu	Val	Ser	Val	Cys	Leu	Cys	Val	Ala	Val	Ile	Val	Ala	Phe	Gln
				245					250					255	
Leu	Thr	Ala	Phe	Thr	Phe	Arg	Lys	Asn	Leu	Ala	Ala	Thr	Ala	Leu	Leu
			260					265					270		
Leu	Ser	Leu	Phe	Gly	Tyr	Ala	Thr	Leu	Pro	Trp	Met	Tyr	Leu	Met	Ser
		275					280					285			
Arg	Ile	Phe	Ser	Ser	Ser	Asp	Val	Ala	Phe	Ile	Ser	Tyr	Val	Ser	Leu
	290					295					300				
Asn	Phe	Ile	Phe	Gly	Leu	Cys	Thr	Met	Leu	Ile	Thr	Ile	Met	Pro	Arg
305					310					315					320
Leu	Leu	Ala	Ile	Ile	Ser	Lys	Ala	Lys	Asn	Leu	Gln	Asn	Ile	Tyr	Asp
				325					330					335	
Val	Leu	Lys	Trp	Val	Phe	Thr	Ile	Phe	Pro	Gln	Phe	Cys	Leu	Gly	Gln
			340					345					350		
Gly	Leu	Val	Glu	Leu	Cys	Tyr	Asn	Gln	Ile	Lys	Tyr	Asp	Leu	Thr	His
		355					360					365			
Asn	Phe	Gly	Ile	Asp	Ser	Tyr	Val	Ser	Pro	Phe	Glu	Met	Asn	Phe	Leu
	370					375					380				
Gly	Trp	Ile	Phe	Val	Gln	Leu	Ala	Ser	Gln	Gly	Thr	Val	Leu	Leu	Leu
385					390					395					400
Leu	Arg	Val	Leu	Leu	His	Trp	Asp	Leu	Leu	Arg	Trp	Pro	Arg		His
				405					410					415	

Ser	Thr	Leu	Gln	Gly	Thr	Val	Lys	Ser	Ser	Lys	Asp	Thr	Asp	Val	Glu	
			420					425					430			
Glu	Glu	Glu	Lys	Arg	Val	Phe	Glu	Gly	Arg	Thr	Asn	Gly	Asp	Ile	Leu	
		435					440					445				
Val	Leu	Tyr	Asn	Leu	Ser	Lys	His	Tyr	Arg	Arg	Phe	Phe	Gln	Asn	Ile	
	450					455					460					
Ile	Ala	Val	Gln	Asp	Ile	Ser	Leu	Gly	Ile	Pro	Lys	Gly	Glu	Cys	Phe	
465					470					475					480	
Gly	Leu	Leu	Gly	Val	Asn	Gly	Ala	Gly	Lys	Ser	Thr	Thr	Phe	Lys	Met	
				485					490					495		
Leu	Asn	Gly	Glu	Val	Ser	Leu	Thr	Ser	Gly	His	Ala	Ile	Ile	Arg	Thr	
			500					505					510			
Pro	Met	Gly	Asp	Ala	Val	Asp	Leu	Ser	Ser	Ala	Gly	Thr	Ala	Gly	Val	
		515					520					525				
Leu	Ile	Gly	Tyr	Cys	Pro	Gln	Gln	Asp	Ala	Leu	Asp	Glu	Leu	Leu	Thr	
	530					535					540					
Gly	Trp	Glu	His	Leu	Tyr	Tyr	Tyr	Cys	Ser	Leu	Arg	Gly	Ile	Pro	Arg	
545					550					555					560	
Gln	Cys	Ile	Pro	Glu	Val	Ala	Gly	Asp	Leu	Ile	Arg	Arg	Leu	His	Leu	
				565					570					575		
Glu	Ala	His	Ala	Asp	Lys	Pro	Val	Ala	Thr	Tyr	Ser	Gly	Gly	Thr	Lys	
			580					585					590			
Arg	Lys	Leu	Ser	Thr	Ala	Leu	Ala	Leu	Val	Gly	Lys	Pro	Asp	Ile	Leu	
		595					600					605				
Leu	Leu	Asp	Glu	Pro	Ser	Ser	Gly	Met	Asp	Pro	Cys	Ser	Lys	Arg	Tyr	
	610					615					620					
Leu	Trp	Gln	Thr	Ile	Met	Lys	Glu	Val	Arg	Glu	Gly	Cys	Ala	Ala	Val	
625					630					635					640	
Leu	Thr	Ser	His	Ser	Met	Glu	Glu	Cys	Glu	Ala	Leu	Cys	Thr	Arg	Leu	

Ala Ile Met Val Asn Gly Ser Phe Lys Cys Leu Gly Ser Pro Gln His Ile Lys Asn Arg Phe Gly Asp Gly Tyr Thr Val Lys Val Trp Leu Cys Lys Glu Ala Asn Gln His Cys Thr Val Ser Asp His Leu Lys Leu Tyr Phe Pro Gly Ile Gln Phe Lys Gly Gln His Leu Asn Leu Leu Glu Tyr His Val Pro Lys Arg Trp Gly Cys Leu Ala Asp Leu Phe Lys Val Ile Glu Asn Asn Lys Thr Phe Leu Asn Ile Lys His Tyr Ser Ile Asn Gln Thr Thr Leu Glu Gln Val Phe Ile Asn Phe Ala Ser Glu Gln Gln Thr Leu Gln Ser Thr Leu Asp Pro Ser Thr Asp Ser His His Thr His His Leu Pro Ile

<210> 3710

<211> 901

<212> PRT

<213> Homo sapiens

<400> 3710

Met Ser Leu Glu Leu Glu Asp Ala Lys Lys Val Ala Glu Phe Gln
1 5 10 15

Lys	Gln	Cys	Glu	Glu	Tyr	Leu	Val	Ile	Ile	Val	Gln	Gln	Lys	Arg	Glu
			20					25					30		
Ala	Asp	Glu	Gln	Gln	Lys	Ala	Leu	Glu	Ser	Leu	Asn	Lys	Lys	Asp	Ile
		35					40					45			
Gly	Glu	Ile	Lys	Ser	Tyr	Gly	Arg	Pro	Pro	Ala	Gln	Val	Glu	Ile	Val
	50					55					60				
Met	Gln	Ala	Val	Met	Ile	Leu	Arg	Gly	Asn	Glu	Pro	Thr	Trp	Ala	Glu
65					70					75					80
Ala	Lys	Arg	Gln	Leu	Gly	Glu	Gln	Asn	Phe	Ile	Lys	Ser	Leu	Ile	Asn
				85					90					95	
Phe	Asp	Lys	Asp	Asn	Ile	Ser	Asp	Lys	Val	Leu	Lys	Lys	Ile	Gly	Ala
			100					105					110		
Tyr	Cys	Ala	Gln	Pro	Asp	Phe	Gln	Pro	Asp	Ile	Ile	Gly	Arg	Val	Ser
		115					120					125			
Leu	Ala	Ala	Lys	Ser	Leu	Cys	Met	Trp	Val	Arg	Ala	Met	Glu	Leu	Tyr
	130					135					140				
Gly	Arg	Leu	Tyr	Arg	Val	Val	Glu	Pro	Lys	Arg	Ile	Arg	Met	Asn	Ala
145					150					155					160
Ala	Leu	Ala	Gln	Leu	Arg	Glu	Lys	Gln	Ala	Ala	Leu	Ala	Glu	Ala	Gln
				165					170					175	
Glu	Lys	Leu	Arg	Glu	Val	Ala	Glu	Lys	Leu	Glu	Met	Leu	Lys	Lys	Gln
			180					185					190		
Tyr	Asp	Glu	Lys	Leu	Ala	Gln	Lys	Glu	Glu	Leu	Arg	Lys	Lys	Ser	Glu
		195					200					205			
Glu	Met	Glu	Leu	Lys	Leu	Glu	Arg	Ala	Gly	Met	Leu	Val	Ser	Gly	Leu
	210					215					220				
Ala	Gly	Glu	Lys	Ala	Arg	Trp	Glu	Glu	Thr	Val	Gln	Gly	Leu	Glu	Glu
225					230					235					240
Asp	Leu	Gly	Tyr	Leu	Val	Gly	Asp	Cys	Leu	Leu	Ala	Ala	Ala	Phe	Leu

				245					250					255	
Ser	Tyr	Met	Gly	Pro	Phe	Leu	Thr	Asn	Tyr	Arg	Asp	Glu	Ile	Val	Asn
			260					265					270		
Gln	Ile	Trp	Ile	Gly	Lys	Ile	Trp	Glu	Leu	Gln	Val	Pro	Cys	Ser	Pro
		275					280					285			
Ser	Phe	Ala	Ile	Asp	Asn	Phe	Leu	Cys	Asn	Pro	Thr	Lys	Val	Arg	Asp
	290					295					300				
Trp	Asn	Ile	Gln	Gly	Leu	Pro	Ser	Asp	Ala	Phe	Ser	Thr	Glu	Asn	Gly
305					310					315					320
Ile	Ile	Val	Thr	Arg	Gly	Asn	Arg	Trp	Ala	Leu	Met	Ile	Asp	Pro	Gln
				325					330					335	
Ala	Gln	Ala	Leu	Lys	Trp	Ile	Lys	Asn	Met	Glu	Gly	Gly	Gln	Gly	Leu
			340					345					350		
Lys	Ile	Ile	Asp	Leu	Gln	Met	Ser	Asp	Tyr	Leu	Arg	Ile	Leu	Glu	His
		355					360					365			
Ala	Ile	His	Phe	Gly	Tyr	Pro	Val	Leu	Leu	Gln	Asn	Val	Gln	Glu	Tyr
	370					375					380				
Leu	Asp	Pro	Thr	Leu	Asn	Pro	Met	Leu	Asn	Lys	Ser	Val	Ala	Arg	Ile
385					390					395					400
Gly	Gly	Arg	Leu	Leu	Met	Arg	Ile	Gly	Asp	Lys	Glu	Val	Glu	Tyr	Asn
				405					410					415	
Thr	Asn	Phe	Arg	Phe	Tyr	Ile	Thr	Thr	Lys	Leu	Ser	Asn	Pro	His	Tyr
			420					425					430		
Ser	Pro	Glu	Thr	Ser	Ala	Lys	Thr	Thr	Ile	Val	Asn	Phe	Ala	Val	Lys
		435					440					445			
Glu	Gln	Gly	Leu	Glu	Ala	Gln	Leu	Leu	Gly	Ile	Val	Val	Arg	Lys	Glu
	450					455					460				
Arg	Pro	Glu	Leu	Glu	Glu	Gln	Lys	Asp	Ser	Leu	Val	Ile	Asn	Ile	Ala
465					470					475					480

Ala	Gly	Lys	Arg	Lys	Leu	Lys	Glu	Leu	Glu	Asp	Glu	Ile	Leu	Arg	Leu
				485					490					495	
Leu	Asn	Glu	Ala	Thr	Gly	Ser	Leu	Leu	Asp	Asp	Val	Gln	Leu	Val	Asn
			500					505					510		
Thr	Leu	His	Thr	Ser	Lys	Ile	Thr	Ala	Thr	Glu	Val	Thr	Glu	Gln	Leu
		515					520					525			
Glu	Thr	Ser	Glu	Thr	Thr	Glu	Ile	Asn	Thr	Asp	Leu	Ala	Arg	Glu	Ala
	530					535					540				
Tyr	Arg	Pro	Cys	Ala	Gln	Arg	Ala	Ser	Ile	Leu	Phe	Phe	Val	Leu	Asn
545					550					555					560
Asp	Met	Gly	Cys	Ile	Asp	Pro	Met	Tyr	Gln	Phe	Ser	Leu	Asp	Ala	Tyr
				565					570					575	
Ile	Ser	Leu	Phe	Ile	Leu	Ser	Ile	Asp	Lys	Ser	His	Arg	Ser	Asn	Lys
			580					585					590		
Leu	Glu	Asp	Arg	Ile	Asp	Tyr	Leu	Asn	Asp	Tyr	His	Thr	Tyr	Ala	Val
		595					600					605			
Tyr	Arg	Tyr	Thr	Cys	Arg	Thr	Leu	Phe	Glu	Arg	His	Lys	Leu	Leu	Phe
	610					615					620				
Ser	Phe	His	Met	Cys	Ala	Lys	Ile	Leu	Glu	Thr	Ser	Gly	Lys	Leu	Asn
625					630					635					640
Met	Asp	Glu	Tyr	Asn	Phe	Phe	Leu	Arg	Gly	Gly	Val	Val	Leu	Asp	Arg
				645					650					655	
Glu	Gly	Gln	Met	Asp	Asn	Pro	Cys	Ser	Ser	Trp	Leu	Ala	Asp	Ala	Tyr
			660					665					670		
Trp	Asp	Asn	Ile	Thr	Glu	Leu	Asp	Lys	Leu	Thr	Asn	Phe	His	Gly	Leu
		675					680					685			
Met	Asn	Ser	Phe	Glu	Gln	Tyr	Pro	Arg	Asp	Trp	His	Leu	Trp	Tyr	Thr
	690					695					700				
Asn	Ala	Ala	Pro	Glu	Lys	Ala	Met	Leu	Pro	Gly	Glu	Trp	Glu	Asn	Ala

Cys Asn Glu Met Gln Arg Met Leu Ile Val Arg Ser Leu Arg Gln Asp Arg Val Ala Phe Cys Val Thr Ser Phe Ile Ile Thr Asn Leu Gly Ser Arg Phe Ile Glu Pro Pro Val Leu Asn Met Lys Ser Val Leu Glu Asp Ser Thr Pro Arg Ser Pro Leu Val Phe Ile Leu Ser Pro Gly Val Asp Pro Thr Ser Ala Leu Leu Gln Leu Ala Glu His Met Gly Met Ala Gln Arg Phe His Ala Leu Ser Leu Gly Gln Gly Gln Ala Pro Ile Ala Ala Arg Leu Leu Arg Glu Gly Val Thr Gln Gly His Trp Val Phe Leu Ala Asn Cys His Leu Ser Leu Ser Trp Met Pro Asn Leu Asp Lys Leu Val Glu Gln Leu Gln Val Glu Asp Pro His Pro Ser Phe Arg Leu Trp Leu Ser Ser Ile Pro His Pro Asp Phe Pro Ile Ser Ile Leu Gln Val Ser Ile Lys Met Thr Thr Glu Pro Pro Lys Gly Leu Lys Ala Asn Met Thr Arg Leu Tyr Gln Gly

<210> 3711

<211> 270

<212> PRT

<213> Homo sapiens

<400> 3711

Met Val Met His Ala Arg Ser Gly Gly Asn Leu Glu Val Met Gly Leu

1 5 10 15

Met Leu Gly Lys Val Asp Gly Glu Thr Met Ile Ile Met Asp Ser Phe
20 25 30

Ala Leu Pro Val Glu Gly Thr Glu Thr Arg Val Asn Ala Gln Ala Ala
35 40 45

Ala Tyr Glu Tyr Met Ala Ala Tyr Ile Glu Asn Ala Lys Gln Val Gly
50 55 60

Arg Leu Glu Asn Ala IIe Gly Trp Tyr His Ser His Pro Gly Tyr Gly
65 70 75 80

Cys Trp Leu Ser Gly Ile Asp Val Ser Thr Gln Met Leu Asn Gln Gln
85 90 95

Phe Gln Glu Pro Phe Val Ala Val Val Ile Asp Pro Thr Arg Thr Ile
100 105 110

Ser Ala Gly Lys Val Asn Leu Gly Ala Phe Arg Thr Tyr Pro Lys Gly
115 120 125

Tyr Lys Pro Pro Asp Glu Gly Pro Ser Glu Tyr Gln Thr Ile Pro Leu 130 135 140

Asn Lys Ile Glu Asp Phe Gly Val His Cys Lys Gln Tyr Tyr Ala Leu 145 150 155 160

Glu Val Ser Tyr Phe Lys Ser Ser Leu Asp Arg Lys Leu Leu Glu Leu 165 170 175

Leu Trp Asn Lys Tyr Trp Val Asn Thr Leu Ser Ser Ser Ser Leu Leu 180 185 190

Thr Asn Ala Asp Tyr Thr Thr Gly Gln Val Phe Asp Leu Ser Glu Lys

205 195 200 Leu Glu Gln Ser Glu Ala Gln Leu Gly Arg Gly Ser Phe Met Leu Gly 220 210 215 Leu Glu Thr His Asp Arg Lys Ser Glu Asp Lys Leu Ala Lys Ala Thr 225 230 235 240 Arg Asp Ser Cys Lys Thr Thr Ile Glu Ala Ile His Gly Leu Met Ser 250 255 245 Gln Val Ile Lys Asp Lys Leu Phe Asn Gln Ile Asn Ile Ser

265

270

<210> 3712

<211> 431

<212> PRT

<213> Homo sapiens

260

<400> 3712

Met Ala Ser Ser Leu Leu Glu Glu Glu Val His Tyr Gly Ser Ser Pro

1 5 10 15

Leu Ala Met Leu Thr Ala Ala Cys Ser Lys Phe Gly Gly Ser Ser Pro
20 25 30

Leu Arg Asp Ser Thr Thr Leu Gly Lys Ala Gly Thr Lys Lys Pro Tyr

35 40 45

Ser Val Gly Ser Asp Leu Ser Ala Ser Lys Thr Met Gly Asp Ala Tyr 50 55 60

Pro Ala Pro Phe Thr Ser Thr Asn Gly Leu Leu Ser Pro Ala Gly Ser 65 70 75 80

Pro Pro Ala Pro Thr Ser Gly Tyr Ala Asn Asp Tyr Pro Pro Phe Ser 85 90 95

His	Ser	Phe	Pro	Gly	Pro	Thr	Gly	Thr	Gln	Asp	Pro	Gly	Leu	Leu	Val
			100					105					110		
Pro	Lys	Gly	His	Ser	Ser	Ser	Asp	Cys	Leu	Pro	Ser	Val	Tyr	Thr	Ser
		115					120					125			
Leu	Asp	Met	Thr	His	Pro	Tyr	Gly	Ser	Trp	Tyr	Lys	Ala	Gly	Ile	His
	130					135					140				
Ala	Gly	Ile	Ser	Pro	Gly	Pro	Gly	Asn	Thr	Pro	Thr	Pro	Trp	Trp	Asp
145					150					155					160
Met	His	Pro	Gly	Gly	Asn	Trp	Leu	Gly	Gly	Gly	Gln	Gly	Gln	Gly	Asp
				165					170					175	
Gly	Leu	Gln	Gly	Thr	Leu	Pro	Thr	Gly	Pro	Ala	Gln	Pro	Pro	Leu	Asn
			180					185					190		
Pro	Gln	Leu	Pro	Thr	Tyr	Pro	Ser	Asp	Phe	Ala	Pro	Leu	Asn	Pro	Ala
		195					200					205			
Pro	Tyr	Pro	Ala	Pro	His	Leu	Leu	Gln	Pro	Gly	Pro	Gln	His	Val	Leu
	210					215					220				
Pro	Gln	Asp	Val	Tyr	Lys	Pro	Lys	Ala	Val	Gly	Asn	Ser	Gly	Gln	Leu
225					230					235					240
Glu	Gly	Ser	Gly	Gly	Ala	Lys	Pro	Pro	Arg	Gly	Ala	Ser	Thr	Gly	Gly
				245					250					255	
Ser	Gly	Gly	Tyr	Gly	Gly	Ser	Gly	Ala	Gly	Arg	Ser	Ser	Cys	Asp	Cys
			260					265					270		
Pro	Asn	Cys	Gln	Glu	Leu	Glu	Arg	Leu	Gly	Ala	Ala	Ala	Ala	Gly	Leu
		275					280					285			
Arg	Lys	Lys	Pro	Ile	His	Ser	Cys	His	Ile	Pro	Gly	Cys	Gly	Lys	Val
	290					295					300				
Tyr	Gly	Lys	Ala	Ser	His	Leu	Lys	Ala	His	Leu	Arg	Trp	His	Thr	Gly
305					310					315					320
Glu	Arg	Pro	Phe	Val	Cys	Asn	Trp	Leu	Phe	Cys	Gly	Lys	Arg	Phe	Thr

Arg Ser Asp Glu Leu Glu Arg His Val Arg Thr His Thr Arg Glu Lys Lys Phe Thr Cys Leu Leu Cys Ser Lys Arg Phe Thr Arg Ser Asp His Leu Ser Lys His Gln Arg Thr His Gly Glu Pro Gly Pro Pro Pro Ser Gly Pro Lys Glu Leu Gly Glu Gly Arg Ser Thr Gly Glu Glu Glu Ala Ser Gln Thr Pro Arg Pro Ser Ala Ser Pro Ala Thr Pro Glu Lys Ala Pro Gly Gly Ser Pro Glu Gln Ser Asn Leu Leu Glu Ile

<210> 3713

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3713

Met Ser Met Phe Phe Leu Val Leu Ile Thr Val Pro Pro Pro Pro Asp Arg Pro Gly Leu Gln Glu Lys Arg Lys Val Glu Gln Leu Gln Tyr Asn Leu Glu Leu Ala Phe His His His Leu Cys Lys Thr His Arg Gln Ser Ile Leu Ala Lys Leu Pro Pro Lys Gly Lys Leu Arg Ser Leu Cys

Ser Gln His Val Glu Arg Leu Gln IIe Phe Gln His Leu His Pro IIe
65 70 75 80

Val Val Gln Ala Ala Phe Pro Pro Leu Tyr Lys Glu Leu Phe Ser Thr
85 90 95

Glu Thr Glu Ser Pro Val Gly Leu Ser Lys
100 105

<210> 3714

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3714

Met Ser Phe Gln Tyr Ser Val Gly Glu Arg Ile Tyr Gly Asn Ser Ser

1 5 10 15

Ser Cys Ala Pro Leu Glu Pro Ala Ser Arg Tyr Leu Lys Ala Gly Asn 20 25 30

Ala Ala Leu Lys Glu Ser His Arg Ser Trp Leu Met Cys Cys Gly Asp
35 40 45

Ser Val Ala Pro Phe His Ser Gln Ile Val Gly Arg Asn Leu Lys Trp 50 55 60

Pro Ala Ser Trp Thr Trp Leu Val IIe IIe Phe Pro Ala Ser Ser Val 65 70 75 80

Arg Lys Trp His Ala Ala Val Phe Ser Leu Asn His Thr Val Arg Gly
85 90 95

His Asn Trp Arg His Trp Leu Leu Tyr Gln Gly Leu Asn Trp Asn Asp 100 105 110

Met Leu Ser Asp Ile Asn Arg Leu Leu Glu Gly Ile Lys Val Asp Leu

115 120 125

<210> 3715

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3715

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro

1 5 10 15

Glu Thr Ser Gly Glu Phe Val Leu Thr Gln Ser Pro Gly Thr Leu Thr

20 25 30

Leu Ser Pro Gly Glu Thr Ala Thr Leu Ser Cys Arg Thr Ser Gln Ser

35 40 45

Val Arg Ser Val Tyr Ile Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala

50 55 60

Pro Arg Pro Val Ile His Gly Gly Ser Ser Arg Ala Thr Asp Ile Pro

65 70 75 80

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile

85 90 95

Asn Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr

100 105 110

Gly Arg Ser Val Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg

115 120 125

Lys Cys Thr Phe Leu Ser Leu Leu Leu Ile Arg Phe Leu Asn Leu Gly

130 135 140

Leu Arg Asn Arg Glu Leu Val His Leu Lys Glu Gln Ser Ser Ala Arg

145 150 155 160

Gln Leu Ser Glu Ala Ser Gln Trp Ser Asp Phe Leu Cys Ile Gly Gln

165
170
175

Val Ser Asp Ile Asn Ser Glu Lys Thr Phe Leu Leu Gly Gly Lys Leu

180
185
190

<210> 3716

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3716

Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro

1 5 10 15

Val Thr Thr Gly Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser
20 25 30

Ala Tyr Pro Gly Glu Arg Val Thr Phe Ser Cys Arg Ala Ser Gln Ser
35 40 45

Val Gly Thr Thr Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
50 55 60

Arg Arg Leu Ile Ser Gly Ala Ser Ile Arg Ala Ala Asp Ile Pro Ala 65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser 85 90 95

Ser Leu Gln Ser Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Asn 100 105 110

Met Trp Pro Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
115 120 125

Arg Glu

130

<210> 3717

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3717

Met Ser Gly Glu Leu Ser Asn Arg Phe Gln Gly Gly Lys Ala Phe Gly

1 5 10 15

Leu Leu Lys Ala Arg Gln Glu Arg Arg Leu Ala Glu Ile Asn Arg Tyr

20 25 30

Cys Ala Gly Arg Glu Pro Gln Leu Gln Arg Ile Ser Cys Ser Gln His

35 40 45

Ser Cys Leu Leu Ala Leu Leu Phe Gln Glu Phe Leu Cys Asp Gln Lys

50 55 60

Tyr Ser Asp Glu Glu Asn Leu Pro Glu Lys Leu Thr Ala Phe Lys Glu

65 70 75 80

Lys Tyr Met Glu Phe Asp Leu Asn Asn Glu Gly Glu Ile Asp Leu Met

85 90 95

Ser Leu Lys Arg Met Met Glu Lys Leu Gly Val Pro Lys Thr His Leu

100 105 110

Glu Met Lys Lys Met Ile Ser Glu Val Thr Gly Gly Val Ser Asp Thr

115 120 125

Ile Ser Tyr Arg Asp Phe Val Asn Met Met Leu Gly Lys Arg Ser Ala

130 135 140

Val Leu Lys Leu Val Met Met Phe Glu Gly Lys Ala Asn Glu Ser Ser

145 150 155 160

Pro Lys Pro Val Gly Pro Pro Pro Glu Arg Asp Ile Ala Ser Leu Pro 165 170 175

<210> 3718

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3718

Met Lys Ala Lys Asp Leu Ile Val Thr Pro Ala Thr Ile Leu Lys Glu

1 5 10 15

Lys Pro Asp Pro Asn Asn Leu Val Phe Gly Thr Val Phe Thr Asp His

20 25 30

Met Leu Thr Val Glu Trp Ser Ser Glu Phe Gly Trp Glu Lys Pro His

35 40 45

Ile Lys Pro Leu Gln Asn Leu Ser Leu His Pro Gly Ser Ser Ala Leu

50 55 60

His Tyr Ala Val Glu Val Phe Asp Lys Glu Glu Leu Leu Glu Cys Ile

65 70 75 80

Gln Gln Leu Val Lys Leu Asp Gln Glu Trp Val Pro Tyr Ser Thr Ser

85 90 95

Ala Ser Leu Tyr Ile Arg Pro Thr Phe Ile Gly Thr Glu Pro Ser Leu

100 105 110

Gly Val Lys Lys Pro Thr Lys Ala Leu Leu Phe Val Leu Leu Ser Pro

115 120 125

Val Gly Pro Tyr Phe Ser Ser Gly Thr Phe Asn Pro Val Ser Leu Trp

130 135 140

Ala Asn Pro Lys Tyr Val Arg Ala Trp Lys Gly Gly Thr Gly Asp Cys

Lys Met Gly Gly Asn Tyr Gly Ser Ser Leu Phe Ala Gln Cys Glu Ala Val Asp Asn Gly Cys Gln Gln Val Leu Trp Leu Tyr Gly Glu Asp His Gln Ile Thr Glu Val Gly Thr Met Asn Leu Phe Leu Tyr Trp Ile Asn Glu Asp Gly Glu Glu Leu Ala Thr Pro Pro Leu Asp Gly Ile Ile Leu Pro Gly Val Thr Arg Arg Cys Ile Leu Asp Leu Ala His Gln Trp Gly Glu Phe Lys Val Ser Glu Arg Tyr Leu Thr Met Asp Asp Leu Thr Thr Ala Leu Glu Gly Asn Arg Val Arg Glu Met Phe Gly Ser Gly Thr Ala Cys Val Val Cys Pro Val Ser Asp Ile Leu Tyr Lys Gly Glu Thr Ile His Ile Pro Thr Met Glu Asn Gly Pro Lys Leu Ala Ser Arg Ile Leu Ser Lys Leu Thr Asp Ile Gln Tyr Gly Arg Glu Glu Ser Asp Trp Thr Ile Val Leu Ser

<210> 3719

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3719 Met Pro Gln Asn Cys Ser Ala Pro Val Pro Met Glu Gly Gly Ser Pro Met Trp Ala Glu Gln Gly Cys Pro Arg Gln Asp Val Gln Pro Pro Gly Thr Gly Glu Leu Gly Gly Pro Ala Ala Pro Trp Leu Arg Ile Thr Arg Cys Leu Asp Leu Asp Thr Phe Gly Leu Phe Thr Ser Leu Val Gly Phe Gln Thr Arg His Phe Trp Leu Pro Pro Cys Leu Pro Ser Leu Leu Pro Thr His Thr Cys Ser Phe Cys Arg Ser Cys Leu Ser Gln Thr Phe Phe Leu Phe Leu Ser Leu Pro Thr Ser Leu Pro Pro His Pro Leu Pro Glu Glu Gly Lys Asn Ser Val Ser His Lys Gln Asn Ile Cys His Ser Ile Gly Gly Arg Thr Glu Ala Gly Ala Gln Asn Ile Leu Glu Gly Thr Gln Ala Arg Val Glu Gly Leu Ser Cys Leu Ile Trp Lys Glu Asp Phe Asp Val Thr Leu Leu Arg Leu Ser Trp Glu Ala Ser Arg Cys Phe Met Ala

<210> 3720

Ser Thr Leu Cys Val Lys Asp Gly

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3720

Met Gly Pro Gly Pro Ser Pro Asn Trp Thr Leu Asp Pro Glu Pro Arg

1 5 10 15

Cys Arg Leu Trp Ser Glu Pro Arg Leu Pro Ala Gly Pro Gly Val Leu 20 25 30

Ala Ala Gly Ser Pro Arg Leu Pro Cys Arg Tyr Val Met Thr Ser Glu
35 40 45

Phe Thr Leu Gly Pro Thr Ala Glu Phe Phe Arg Glu His Asn Phe Phe 50 55 60

His Leu Asp Pro Ala Asn Val Val Met Phe Glu Gln Arg Leu Leu Pro 65 70 75 80

Ala Val Thr Phe Asp Gly Lys Val Ile Leu Glu Arg Lys Asp Lys Val

85 90 95

Ala Met Ala Pro Asp Gly Asn Gly Gly Leu Tyr Cys Ala Leu Glu Asp 100 105 110

His Lys Ile Leu Glu Asp Met Glu Arg Arg Gly Val Glu Phe Val His
115 120 125

Val Tyr Cys Val Asp Asn Ile Leu Val Arg Leu Ala Asp Pro Val Phe 130 135 140

Ile Gly Phe Cys Val Leu Gln Gly Ala Asp Cys Gly Ala Lys Val Val

145 150 155 160

Glu Lys Ala Tyr Pro Glu Glu Pro Val Gly Val Val Cys Gln Val Asp 165 170 175

Gly Val Pro Gln Val Val Glu Tyr Ser Glu Ile Ser Pro Glu Thr Ala 180 185 190 Gln Leu Arg Val Ser Asp Gly Ser Leu Leu Tyr Asn Ala Gly Asn Ile Cys Asn His Phe Phe Thr Arg Gly Phe Leu Lys Ala Val Thr Arg Glu Phe Glu Pro Leu Leu Lys Pro His Val Ala Val Lys Lys Val Pro Tyr Val Asp Glu Glu Gly Asn Leu Val Lys Pro Leu Lys Pro Asn Gly Ile Lys Met Glu Lys Phe Val Phe Asp Val Phe Arg Phe Ala Lys Asn Phe Ala Ala Leu Glu Val Leu Arg Glu Glu Glu Phe Ser Pro Leu Lys Asn Ala Glu Pro Ala Asp Arg Asp Ser Pro Arg Thr Ala Arg Gln Ala Leu Leu Thr Gln His Tyr Arg Trp Ala Leu Arg Ala Gly Ala Arg Phe Leu Asp Ala His Gly Ala Trp Leu Pro Glu Leu Pro Ser Leu Pro Pro Asn Gly Asp Pro Pro Ala Ile Cys Glu Ile Ser Pro Leu Val Ser Tyr Ser Gly Glu Gly Leu Glu Val Tyr Leu Gln Gly Arg Glu Phe Gln Ser Pro Leu Ile Leu Asp Glu Asp Gln Ala Arg Glu Pro Gln Leu Gln Glu Ser

<210> 3721

<211> 379

<212> PRT

<213> Homo sapiens

<400> 3721

Met Ile Phe Met Asn Thr Leu Arg Tyr Leu Gln Thr His Glu Tyr Leu

1 5 10 15

Leu Asp Val Asp Leu Trp Arg Leu Phe Ala Asn Leu Glu Glu Leu Thr
20 25 30

Gln Thr Ser Leu Gly Phe Val Asn Ser Leu Phe Gly Ile Ile Lys Asp 35 40 45

Tyr Val Asp Ala Ser Glu Ile Ser Ser Ser Leu Asp Phe Ile Ser Val
50 55 60

Leu Thr Lys Tyr Phe Arg Gly Ser Leu Cys Gln Ser His Gln Thr Tyr
65 70 75 80

Cys Leu Asn Tyr Ser Ala Ala Ile Phe Tyr Leu Glu Ser Leu Arg Gln
85 90 95

Arg Asp Asp Phe Gly Ile Tyr Leu Lys Trp Cys Glu Gln Asn Glu Gln
100 105 110

Cys Arg Arg Leu His Val Pro Glu Leu Leu Val Ala Pro Leu Gln Arg 115 120 125

Leu Thr Arg Tyr Pro Leu Leu Leu Lys Asn Ile Trp Lys Arg Ser Met
130 135 140

Asp Ser Ala Glu Lys Ile Met Ile Tyr Ser Ile Lys Glu Lys Val Glu 145 150 155 160

Lys Ser Ile Arg Asp Leu Glu Gly Lys Val Lys Trp Leu Asp Asn Phe
165 170 175

Gln Lys Phe Arg Tyr Leu Gln Glu Ile Ile Val Trp Pro Pro Leu Trp 180 185 190

Asp Arg Asp Lys Arg Phe Phe Ile Pro Glu Cys Leu Lys His Ile Phe
195 200 205

Lys Glu His Met Ala Glu Asn Ile Leu Ser Pro Thr Ser Arg His Leu Leu Tyr Glu Gly Lys Leu Thr Leu Ala Glu Ser Thr Arg Phe Leu Asp Val Tyr Leu Phe Leu Phe Asn Asp Phe Leu Leu Val Thr Lys Thr Lys Cys Asn Lys Lys Leu Gly Gly Ser Asp Pro Gly Leu Met Cys Pro Ser Leu Thr Pro Glu Leu Gln Ala Val Ile Lys Glu Gly Gly Ser Cys Thr Val Leu Asp Gln Pro Ile Pro Leu Asp Arg Leu Val Val Lys Ser Ile Glu Pro Leu His Val Ser Val Phe Gly Leu Arg Asn Ala Phe Leu Ile Gln His Glu Asn Arg Tyr Arg Gln Cys Ile Ala Ala Phe Leu Leu Gln Ala Gln Thr Glu Asn Ile Lys Lys Thr Trp Met Ala Gln Ile Thr Thr Ala Ile Ser Cys Phe Thr Lys Ser Gln Glu Thr Lys Lys Ile Ser Leu Phe Thr Leu Pro Ala Glu Ser Ser Glu Ile

<210> 3722

<211> 756

<212> PRT

<213> Homo sapiens

22
4

<400)> 31	(22													
Met	Gln	Cys	Lys	Val	Ile	Leu	Leu	Asp	Gly	Ser	Glu	Tyr	Thr	Cys	Asp
1				5					10					15	
Val	Glu	Lys	Arg	Ser	Arg	Gly	Gln	Val	Leu	Phe	Asp	Lys	Val	Cys	Glu
			20					25					30		
His	Leu	Asn	Leu	Leu	Glu	Lys	Asp	Tyr	Phe	Gly	Leu	Thr	Tyr	Arg	Asp
		35					40					45			
Ala	Glu	Asn	Gln	Lys	Asn	Trp	Leu	Asp	Pro	Ala	Lys	Glu	Ile	Lys	Lys
	50					55					60				
Gln	Val	Arg	Ser	Gly	Ala	Trp	His	Phe	Ser	Phe	Asn	Val	Lys	Phe	Tyr
65					70					75					80
Pro	Pro	Asp	Pro	Ala	Gln	Leu	Ser	Glu	Asp	Ile	Thr	Arg	Tyr	Tyr	Leu
				85					90					95	
Cys	Leu	Gln	Leu	Arg	Asp	Asp	Ile	Val	Ser	Gly	Arg	Leu	Pro	Cys	Ser
			100					105					110		
Phe	Val	Thr	Leu	Ala	Leu	Leu	Gly	Ser	Tyr	Thr	Ala	Gln	Ser	Glu	Leu
		115					120					125			
Gly	Asp	Tyr	Asp	Pro	Asp	Glu	Cys	Gly	Ser	Asp	Tyr	Ile	Ser	Glu	Phe
	130					135					140				
Arg	Phe	Ala	Pro	Asn	His	Thr	Lys	Glu	Leu	Glu	Asp	Lys	Val	Ile	Glu
145					150					155					160
Leu	His	Lys	Ser	His	Arg	Gly	Met	Thr	Pro	Ala	Glu	Ala	Glu	Met	His
				165					170					175	
Phe	Leu	Glu	Asn	Ala	Lys	Lys	Leu	Ser	Met	Tyr	Gly	Val	Asp	Leu	His
			180					185					190		
His	Ala	Lys	Asp	Ser	Glu	Gly	Val	Glu	Ile	Met	Leu	Gly	Val	Cys	Ala
		195					200					205			
Ser	Gly	Leu	Leu	Ile	Tyr	Arg	Asp	Arg	Leu	Arg	Ile	Asn	Arg	Phe	Ala
	210					215					220				

Trp	Pro	Lys	Val	Leu	Lys	Ile	Ser	Tyr	Lys	Arg	Asn	Asn	Phe	Tyr	Ile
225					230					235					240
Lys	Ile	Arg	Pro	Gly	Glu	Phe	Glu	Gln	Phe	Glu	Ser	Thr	Ile	Gly	Phe
				245					250					255	
Lys	Leu	Pro	Asn	His	Arg	Ala	Ala	Lys	Arg	Leu	Trp	Lys	Val	Cys	Val
			260					265					270		
Glu	His	His	Thr	Phe	Phe	Arg	Leu	Leu	Leu	Pro	Glu	Ala	Pro	Pro	Lys
		275					280					285			
Lys	Phe	Leu	Thr	Leu	Gly	Ser	Lys	Phe	Arg	Tyr	Ser	Gly	Arg	Thr	Gln
	290					295					300				
Ala	Gln	Thr	Arg	Arg	Ala	Ser	Ala	Leu	Ile	Asp	Arg	Pro	Ala	Pro	Tyr
305					310					315					320
Phe	Glu	Arg	Ser	Ser	Ser	Lys	Arg	Tyr	Thr	Met	Ser	Arg	Ser	Leu	Asp
				325					330					335	
Gly	Ala	Ser	Val	Asn	Glu	Asn	His	Glu	Ile	Tyr	Met	Lys	Asp	Ser	Met
			340					345					350		
Ser	Ala	Ala	Glu	Val	Gly	Thr	Gly	Gln	Tyr	Ala	Thr	Thr	Lys	Gly	Ile
		355					360					365			
Ser	Gln	Thr	Asn	Leu	Ile	Thr	Thr	Val	Thr	Pro	Glu	Lys	Lys	Ala	Glu
	370					375					380				
Glu	Glu	Arg	Asp	Glu	Glu	Glu	Asp	Lys	Arg	Arg	Lys	Gly	Glu	Glu	Val
385					390					395					400
Thr	Pro	Ile	Ser	Ala	Ile	Arg	His	Glu	Gly	Lys	Thr	Asp	Ser	Glu	Arg
				405					410					415	
Thr	Asp	Thr	Ala	Ala	Asp	Gly	Glu	Thr	Thr	Ala	Thr	Glu	Glu	Leu	Glu
			420					425					430		
Lys	Thr	Gln	Asp	Asp	Leu	Met	Lys	His	Gln	Thr	Asn	Ile	Ser	Glu	Leu
		435					440					445			
Lys	Arg	Thr	Phe	Leu	Glu	Thr	Ser	Thr	Asp	Thr	Ala	Val	Thr	Asn	Glu

	450					455					460				
Trp	Glu	Lys	Arg	Leu	Ser	Thr	Ser	Pro	Val	Arg	Leu	Ala	Ala	Arg	Gln
465					470					475					480
Glu	Asp	Ala	Pro	Met	Ile	Glu	Pro	Leu	Val	Pro	Glu	Glu	Lys	Met	Glu
				485					490					495	
Thr	Lys	Thr	Glu	Ser	Ser	Gly	Ile	Glu	Thr	Glu	Pro	Thr	Val	His	His
			500					505					510		
Leu	Pro	Leu	Ser	Thr	Glu	Lys	Val	Val	Gln	Glu	Thr	Val	Leu	Val	Glu
		515					520					525			
Glu	Arg	Arg	Val	Val	His	Ala	Ser	Gly	Asp	Ala	Ser	Tyr	Ser	Ala	Gly
	530					535					540				
Asp	Ser	Gly	Asp	Ala	Ala	Ala	Gln	Pro	Ala	Phe	Thr	Gly	Ile	Lys	Gly
545					550					555					560
Lys	Glu	Gly	Ser	Ala	Leu	Thr	Glu	Gly	Ala	Lys	Glu	Glu	Gly	Gly	Glu
				565					570					575	
Glu	Val	Ala	Lys	Ala	Val	Leu	Glu	Gln	Glu	Glu	Thr	Ala	Ala	Ala	Sei
			580					585					590		
Arg	Glu	Arg	Gln	Glu	Glu	Gln	Ser	Ala	Ala	Ile	His	Ile	Ser	Glu	Thi
		595					600					605			
Leu	Glu	Gln	Lys	Pro	His	Phe	Glu	Ser	Ser	Thr	Val	Lys	Thr	Glu	Thi
	610					615					620				
Ile	Ser	Phe	Gly	Ser	Val	Ser	Pro	Gly	Gly	Val	Lys	Leu	Glu	Ile	Sei
625					630					635					640
Thr	Lys	Glu	Val	Pro	Val	Val	His	Thr	Glu	Thr	Lys	Thr	Ile	Thr	Туз
				645					650					655	
Glu	Ser	Ser	Gln	Val	Asp	Pro	Gly	Thr	Asp	Leu	Glu	Pro	Gly	Val	Leı
			660					665					670		
Met	Ser	Ala	Gln	Thr	Ile	Thr	Ser	Glu	Thr	Thr	Ser	Thr	Thr	Thr	Thi
		675					680					685			

Thr His Ile Thr Lys Thr Val Lys Gly Gly Ile Ser Glu Thr Arg Ile 700 690 695 Glu Lys Arg Ile Val Ile Thr Gly Asp Ala Asp Ile Asp His Asp Gln 710 715 720 705 Ala Leu Ala Gln Ala Ile Lys Glu Ala Lys Glu Gln His Pro Asp Met 725 730 735 Ser Val Thr Lys Val Val His Lys Glu Thr Glu Ile Thr Pro Glu 750 740 745 Asp Gly Glu Asp 755

<210> 3723

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3723

Met Gly Ala His Gln Leu Pro Val Asp Gly Val Gly Gly Pro Gln

1 5 10 15

Ser Pro Gly Gly Ser Met Pro Gln Ala Gln Thr Gly Ser Ser Gly Ala
20 25 30

Gln Leu Ala Gly Trp Ala Pro Ala Glu Glu Leu Ser Ala Ile Ala Ala 35 40 45

Ala Val Gly Gln Lys Arg Glu Arg Lys Arg Gly Arg Ile Arg Leu Gly
50 55 60

Val Thr Gly Cys Ala Ser Glu Pro Glu Arg Arg Glu Ser Gly Gln Arg
65 70 75 80

Gly Val Ser Gly Ser Arg Glu Gly Leu Gly Pro Ala Gly Trp Ser Gly

90 95 85 Ala Gly Gly Arg Gly Trp Ala Leu Arg Glu Ala Gly Ala Val Gln Ala 100 105 110 Gly Pro Arg Gly Arg Ala Gly Val Lys Glu Ala Pro Asp Gly Arg Gly 125 115 120 Glu Phe Ser Pro Cys Thr Ile Pro Val His Ser Gly Phe Pro Val Glu 135 140 130 Gly Gly Ala Pro Gln Gly Pro Ser Val Phe Pro His Leu Thr His Thr 150 155 160 145 Leu Gly Asp Pro Arg Leu Leu Pro Gly Ala Leu Thr Asp Ile Phe Ala 170 175 165 Glu Trp Arg Gly Pro Val Gly Phe Leu Phe Pro Ser Gln Leu Leu Leu 180 185 190 Asn Arg Val Asp Phe Pro Ser Glu 195 200

<210> 3724

<211> 209

<212> PRT

<213> Homo sapiens

<400> 3724

Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly

1 5 10 15

Val Gln Gly Gln Val Gln Leu Leu Asp Ser Gly Gly Gly Leu Val Gln
20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Ser Tyr Ala Leu Gly Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Ser Val Ile Ser Asp Ser Gly Ser Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu His Leu Gln Leu Ser Ser Leu Arg Val Glu Asp Thr Val Pro Ser Arg Gln Val Arg Asp Met Pro Arg Glu Ala Leu His Glu Ser Gln Pro Gly Cys Asp Cys Ala Leu Pro Ser Ser Leu Asn Ser Thr Tyr Pro Ile Ser Leu Asn Ser Thr Tyr Pro Ile Ser Leu Met Leu Pro Pro Pro Thr Val Thr Ala Pro Thr Gly Pro Arg Gly Pro Ala Leu Arg Phe Arg Ser Glu Pro His Val His Thr Asp Arg Pro Glu Arg Cys Leu Arg Cys His Leu His Leu Asp Ala Leu Lys Trp Glu Glu Arg Cys Ser Arg Thr

Thr

<210> 3725

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3725

Met Ala Lys Gly Leu Leu Glu Pro His Pro Ser Phe Lys Phe Trp Phe

1 5 10 15

Lys Lys Phe His Ala Met Pro His Met Ala Leu Pro Arg Cys Leu Phe

20 25 30

Asp Leu Pro Gly Leu Ser Val Leu Ser Ser Pro Leu Ser Ser Phe Ala

35 40 45

Met Trp Leu Gly Gly Gly Trp Arg Pro Pro Cys Trp Pro Leu Gly Ala

50 55 60

Ala Ala Lys Ala Arg Arg Leu Arg Thr Pro Trp His Leu Trp Ile Ser

Thr Thr Arg Leu Leu Phe Cys Ser Cys Leu Cys Lys Asn Glu Asn Leu

85 90 95

Pro Pro Tyr His Leu Cys Cys Val Gly Leu Arg Arg His Gly Leu Thr

100 105 110

His Pro Ala Ser Cys Lys Pro Ser Gly Thr Ser Gln Cys Ser Pro Pro

115 120 125

Ala Phe Tyr Tyr Ser His His Pro Gly Thr Leu Val Gln Ala Pro

130 135 140

<210> 3726

<211> 208

<212> PRT

<213> Homo sapiens

<400> 3726

Met Trp Cys Asp Tyr Ile Val Gln Gly Lys Arg Phe Ser Gly Val Thr

1 5 10 15

Tyr Gly Tyr Pro Pro Tyr Tyr Leu Ser Pro Ile Arg Cys Ile Val Ser Ser Leu Ser Ala Pro Phe Ser Thr Leu Cys Ser Glu Ser His Gly Leu His Pro Pro Phe Pro Leu Gly Cys Val Ser Pro Asn Phe Val Phe Thr Pro Leu Cys Phe Asn Gly Ser Cys Phe Phe Ser Leu Glu Phe Ala Trp Ile Leu Pro Ile Arg Glu Met Thr Ala Arg Leu Met Gly Gln Lys Tyr Ile His His Thr Asp Ser Arg Ile Thr Lys Met Ile Leu Cys Ser Thr Thr Cys Ser Gly Asn Gln Pro Ala Gly Asp Ser Ile Pro Trp Gln Gln Lys Arg Lys His Gly Leu Leu Lys Gly Arg Phe Leu Val Cys Leu Leu Leu Arg Glu Asn Leu Phe Val Leu Val Cys Val Asn Gln Cys Pro His Leu Arg Asp Val Thr Thr Val Lys Met Gln Asn His Arg Asn Leu Lys Thr Thr Lys Ser Cys Ile Phe Asp Ser Phe Leu Pro Ile Lys Gly Asn Pro Leu Val Asp Phe Lys Asn Lys Ile Arg Val Lys Leu Val His Ser

<210> 3727

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3727

Met Asn Lys Ile Pro Ser Phe Cys Phe Leu Leu Lys Asp Val Ser Asp

1 5 10 15

Lys Leu Ser Leu Arg Phe Pro Gly Leu Tyr Ile Val Gly Gln Arg Asp

20 25 . 30

Leu Leu Phe Asn Tyr Lys Arg Phe Phe Val Ser Leu Leu His Gly Val

35 40 45

Leu Thr Ser Met Ile Leu Phe Phe Ile Pro Leu Gly Ala Tyr Leu Gln

50 55 60

Thr Val Gly Gln Asp Gly Glu Ala Pro Ser Asp Tyr Gln Ser Phe Ala

65 70 75 80

Val Thr Ile Ala Ser Ala Leu Val Ile Thr Val Asn Phe Gln Val Arg

85 90 95

Gly Phe His Trp Pro Tyr Ser Val Ser Ile Gly Thr Tyr Leu Tyr Phe

100 105 110

Cys Ile

<210> 3728

<211> 731

<212> PRT

<213> Homo sapiens

<400> 3728

Met Gly Ser Gly Glu Glu Pro Gly Gln Ser Gly Ala Ser Leu Arg Thr

1 5 10 15

Gly	Pro	Met	Val	Gln	Gly	Arg	Gly	Ile	Met	Thr	Thr	Gly	Ser	Gly	Gln
			20					25					30		
Glu	Pro	Gly	Gln	Ser	Gly	Thr	Ser	Leu	Arg	Thr	Gly	Pro	Met	Gly	Ser
		35					40					45			
Leu	Gly	Gln	Ala	Glu	Gln	Val	Ser	Ser	Met	Pro	Met	Gly	Ser	Leu	Glu
	50					55					60				
His	Glu	Gly	Leu	Val	Ser	Leu	Arg	Pro	Val	Gly	Leu	Gln	Glu	Gln	Glu
65					70	,				75					80
Gly	Pro	Met	Ser	Leu	Gly	Pro	Val	Gly	Ser	Ala	Gly	Pro	Val	Glu	Thr
				85					90					95	
Ser	Lys	Gly	Leu	Leu	Gly	Gln	Glu	Gly	Leu	Val	Glu	Ile	Ala	Met	Asp
			100					105					110		
Ser	Pro	Glu	Gln	Glu	Gly	Leu	Val	Gly	Pro	Met	Glu	Ile	Thr	Met	Gly
		115					120					125			
Ser	Leu	Glu	Lys	Ala	Gly	Pro	Val	Ser	Pro	Gly	Cys	Val	Lys	Leu	Ala
	130					135					140				
Gly	Gln	Glu	Gly	Leu	Val	Glu	Met	Val	Leu	Leu	Met	Glu	Pro	Gly	Ala
145					150					155					160
Met	Arg	Phe	Leu	Gln	Leu	Tyr	His	Glu	Asp	Leu	Leu	Ala	Gly	Leu	Gly
				165					170					175	
Asp	Val	Ala	Leu	Leu	Pro	Leu	Glu	Gly	Pro	Asp	Met	Thr	Gly	Phe	Arg
			180					185					190		
Leu	Cys	Gly	Ala	Gln	Ala	Ser	Cys	Gln	Ala	Ala	Glu	Glu	Phe	Leu	Arg
		195					200					205			
Ser	Leu	Leu	Gly	Gly	Ile	Ser	Cys	His	Val	Leu	Cys	Leu	Glu	His	Pro
	210					215					220				
Gly	Ser	Ala	Arg	Phe	Leu	Leu	Gly	Pro	Glu	Gly	Gln	His	Leu	Leu	Gln
225					230					235					240
Gly	Leu	Glu	Ala	Gln	Phe	Gln	Cys	Val	Phe	Gly	Thr	Glu	Arg	Leu	Ala

				245					250					255	
Thr	Ala	Thr	Leu	Asp	Thr	Gly	Leu	Glu	Glu	Val	Asp	Pro	Thr	Glu	Ala
			260					265					270		
Leu	Pro	Val	Leu	Pro	Gly	Asn	Ala	His	Thr	Leu	Trp	Thr	Pro	Asp	Ser
		275					280					285			
Thr	Gly	Gly	Asp	Gln	Glu	Asp	Val	Ser	Leu	Glu	Glu	Val	Arg	Glu	Leu
	290				:	295					300				
Leu	Ala	Thr	Leu	Glu	Gly	Leu	Asp	Leu	Asp	Gly	Glu	Asp	Trp	Leu	Pro
305					310					315					320
Arg	Glu	Leu	Ġlu	Glu	Glu	Gly	Pro	Gln	Glu	Gln	Pro	Glu	Glu	Glu	Ala
				325					330					335	
Thr	Pro	Gly	His	Glu	Glu	Glu	Glu	Pro	Val	Ala	Pro	Ser	Thr	Val	Ala
			340					345					350		
Pro	Arg	Trp	Leu	Glu	Glu	Glu	Ala	Ala	Leu	Gln	Leu	Ala	Leu	His	Arg
		355					360					365			
Ser	Leu	Glu	Pro	Gln	Gly	Gln	Val	Ala	Glu	Gln	Glu	Glu	Ala	Ala	Ala
	370					375					380				
Leu	Arg	Gln	Ala	Leu	Thr	Leu	Ser	Leu	Leu	Glu	Gln	Pro	Pro	Leu	Glu
385					390					395					400
Ala	Glu	Glu	Pro	Pro	Asp	Gly	Gly	Thr	Asp	Gly	Lys	Ala	Gln	Leu	Val
				405					410					415	
Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu	Leu	Asp	Arg	Ala	Leu
			420					425					430		
Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu	Thr	Val	Gly	Pro	Trp
		435					440					445			
Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg	Leu	Glu	Arg	Cys	His
	450					455					460				
Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr	Ile	Leu	Arg	Gly	Phe
465					470					475					480

Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu	Val	Ala	Leu	Leu	Ala
				485					490					495	
Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu	Ala	Ala	Ser	Gly	Pro
			500					505					510		
Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp	Asn	Asn	Leu	Glu	Arg
		515					520					525			
Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val	Val	Arg	Ala	Phe	Tyr
	530					535					540				
Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg	Val	Val	Arg	Val	Glu
545					550					555					560
Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr	Glu	Leu	Tyr	Arg	Glu
				565					570					575	
Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val	Glu	Gln	Val	Leu	Tyr
			580					585					590		
His	Gly	Thr	Thr	Ala	Pro	Ala	Val	Pro	Asp	Ile	Cys	Ala	His	Gly	Phe
		595					600					605			
Asn	Arg	Ser	Phe	Cys	Gly	Arg	Asn	Ala	Thr	Val	Tyr	Gly	Lys	Gly	Val
	610					615					620				
Tyr	Phe	Ala	Arg	Arg	Ala	Ser	Leu	Ser	Val	Gln	Asp	Arg	Tyr	Ser	Pro
625					630					635					640
Pro	Asn	Ala	Asp	Gly	His	Lys	Ala	Val	Phe	Val	Ala	Arg	Val	Leu	Thr
				645					650					655	
Gly	Asp	Tyr	Gly	Gln	Gly	Arg	Arg	Gly	Leu	Arg	Ala	Pro	Pro	Leu	Arg
			660					665					670		
Gly	Pro	Gly	His	Val	Leu	Leu	Arg	Tyr	Asp	Ser	Ala	Val	Asp	Cys	Ile
		675					680					685			
Cys	Gln	Pro	Ser	Ile	Phe	Val	Ile	Phe	His	Asp	Thr	Gln	Ala	Leu	Pro
	690					695					700				
Thr	Hic	ו ב	ما۲	Thr	Cve	Glii	Hie	Val	Pro	Aro	Ala	Ser	Pro	Asn	Asn

705 710 715 720

Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr
725 730

<210> 3729

<211> 347

<212> PRT

<213> Homo sapiens

<400> 3729

Met Glu His Ala Ala Thr Thr Gly Pro Arg Pro Gly Pro Pro Ser Arg

1 5 10 15

Arg Val Glu Asn Val Ser Pro Leu Gly Leu Ala Ala Pro Ala Met Gly
20 25 30

Leu Lys Ser Ala Arg Ser Pro Lys Gly Gln Glu Gly Ala Gly Ser Cys

35 40 45

Thr Leu Gly Leu Ile Ser Ala Arg Gly Thr Phe Thr Ala Gln Pro
50 55 60

Gly Arg Glu Ala Gly Leu Val Thr Ala Trp Glu Trp Gly His Ser Pro 65 70 75 80

Ala Trp Asp Pro Pro Gly Glu Trp Val Ala Val Pro Pro Gln Val Val

85 90 95

Leu Arg Ala Lys Asp Trp Leu Pro Gly Ala Pro Gly Gly Thr Ala Val
100 105 110

Trp Ala Thr Ser Leu Glu Ala Glu Val Pro Pro Asp Leu Ala Leu Asn 115 120 125

Lys Glu Gln Gln Leu Gln Ile Ser Lys Glu Leu Val Asp Ile Gln Ile 130 135 140

Thr	Thr	His	His	Leu	His	Glu	Gln	His	Glu	Ala	Glu	Ile	Phe	Gln	Leu
145					150					155					160
Lys	Ser	Glu	Ile	Leu	Arg	Leu	Glu	Ser	Arg	Val	Leu	Glu	Leu	Glu	Leu
				165					170					175	
Arg	Gly	Asp	Gly	Thr	Ser	Gln	Gly	Cys	Ala	Val	Pro	Val	Glu	Ser	Asp
			180					185					190		
Pro	Arg	His	Pro	Arg	Ala	Ala	Ala	Gln	Glu	Leu	Arg	His	Lys	Ala	Glr
		195					200					205			
Val	Pro	Gly	His	Ser	Asp	Asp	His	Arg	Phe	Gln	Val	Gln	Pro	Lys	Asr
	210					215					220				
Thr	Met	Asp	Pro	Glu	Asn	Glu	Gln	His	Arg	Leu	Gly	Ser	Gly	Val	Ser
225					230					235					240
Val	Gln	Pro	Pro	Ser	Ser	Gly	Glu	Arg	Ala	Ala	Pro	Glu	Thr	Pro	Sei
				245					250					255	
Leu	Gly	Ser	His	Pro	Ala	Ser	Pro	Val	Cys	Pro	Thr	Ala	Ala	Gly	Gly
			260					265					270		
Ser	Glu	Val	Gly	Ala	Gly	Ala	Ser	Gly	Gly	Pro	Ala	Ala	Gly	Thr	Gly
		275					280					285			
Asp	Ala	Cys	Val	Ser	Gly	His	Leu	Thr	Trp	Gly	Pro	Ile	Leu	Glu	Glr
	290					295					300	٠			
Arg	Glu	Pro	Leu	Ile	Val	Gly	Leu	Leu	Ser	Leu	Thr	Pro	Val	Ser	Sei
305					310					315					320
Gly	Gln	Pro	Trp	Ala	Gly	Ser	Cys	Arg	Glu	Pro	Glu	Arg	Arg	Pro	Gly
				325					330					335	
Gln	Pro	Gly	Ser	Asp	Trp	Pro	His	Arg	Leu	Trp					
			340					345							

<210> 3730

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3730

Met Arg Gly Lys Arg Cys Met Trp Trp Ser Ser Leu Glu Glu Thr Arg

1 5 10 15

His Lys Leu Pro Glu Val Leu Ser Cys Gly Val Pro Arg Ile Cys Leu

20 25 30

Ile Pro Pro Ala Ser His Phe Asp Asn Pro Cys Ala Val Met Ser Thr

35 40 45

Ser Thr Arg Ile Ser Leu Glu Thr Gln Tyr Pro Ser Val Leu Tyr Gly

50 55 60

Gly Tyr Ser Pro Ser His Val Pro Thr Phe Arg Pro Ser Glu Gly Lys

65 70 75 80

Gln Leu Leu Arg Ser Asn Arg Ile Val Ser Ile Asn Thr Leu Asp Thr

85 90 95

Val Thr Ser Leu Arg Ala Trp Trp Glu Pro Ser Gln Phe Gln Phe Pro

100 105 110

Lys Gln Gln Pro Arg Ala Arg Leu Ala Cys Gly Ser Phe

115 120 125

<210> 3731

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3731

Met Tyr Tyr Phe Asp Gln Ile Gln Ile Ser Ile Leu Tyr His Phe Pro 5 10 1 15 Phe Ala Leu Lys Thr Ser Phe Asn Ile Phe Tyr His Ala Ser Leu Val 25 20 30 Lys Thr Ser Phe Gly Leu Leu Ser Leu Lys Thr Val Phe Ile Asn Ser 35 40 45 Ser Leu Phe Lys Ser Ile Phe Val Val Tyr Arg Arg Val Ser Trp Ser 50 55 60 Phe Leu Lys Ile Phe Tyr Tyr Thr Leu Thr Ser Arg Val His Val His 70 75 80 65 Asn Val Gln Asp Cys Tyr Ile Cys Ile His Val Pro Cys Trp Cys Ala 90 95 85 Ala Pro Ile Asn Ser Ser Phe Val Leu Gly Ile Ser Pro Asn Ala Ile 100 105 110 Pro Ser Pro Ser Pro His Pro Thr Thr Gly Pro Ser Val 120 125 115

<210> 3732

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3732

Met Phe Cys Ser Leu Val Lys Gln His Thr Leu Ala Leu Pro Thr Leu

1 5 10 15

Pro Phe Gln Phe Ser Trp Leu Phe Leu Arg Val Phe Phe Gln Ile Asn 20 25 30

Phe Asn Lys Arg Val Ser Arg Ser Lys Met Asn Ala Gly Arg Phe Phe

35 40 45

Phe Phe Arg Val Gly Val Ser Leu Cys Arg Leu Gly Trp Ser Ala
50 55 60

Val Ala Trp Ile Ser Ala His Cys Lys Leu Arg Leu Pro Gly Ser Cys 65 70 75 80

His Ser Pro Asp Ser Ala Ser Gly Val Ala Gly Thr Thr Gly Ala Arg 85 90 95

His Gln Ala Arg Leu Ile Phe Phe Phe Val Phe Leu Val Glu Thr Gly
100 105 110

Phe His Arg Val Ser Gln Asn Gly Phe Tyr Leu Leu Ala Ser 115 120 125

<210> 3733

<211> 1433

<212> PRT

<213> Homo sapiens

<400> 3733

Met Tyr Trp Ala Val Asp Arg Cys Tyr Thr Gly Ser Gly Arg Val Ala

1 5 10 15

Ala Gly Cys Phe Lys Ala Ile Ala Asn Val Phe Gln Asn Arg Asp Tyr
20 25 30

Gln Cys Asp Thr Val Met Leu Leu Asn Leu Ile Leu Phe Lys Ala Ala 35 40 45

Asp Ser Ser Arg Ser Ile Tyr Glu Val Ala Met Gln Leu Leu Gln Ile 50 55 60

Leu Glu Pro Lys Met Phe Arg Tyr Ala His Lys Leu Glu Val Gln Arg

65 70 75 80

Thr	Asp	Gly	Val	Leu	Ser	Gln	Leu	Ser	Pro	Leu	Pro	His	Leu	Tyr	Ser
				85					90					95	
Val	Ser	Tyr	Tyr	Gln	Leu	Ser	Glu	Glu	Leu	Ala	Arg	Ala	Tyr	Pro	Glu
			100					105					110		
Leu	Thr	Leu	Ala	Ile	Phe	Ser	Glu	Ile	Ser	Gln	Arg	Ile	Gln	Thr	Ala
		115					120					125			
His	Pro	Ala	Gly	Arg	Gln	Val	Met	Leu	His	Tyr	Leu	Leu	Pro	Trp	Met
	130					135					140				
Asn	Asn	Ile	Glu	Leu	Val	Asp	Leu	Lys	Pro	Leu	Pro	Thr	Ala	Arg	Arg
145					150					155					160
His	Asp	Glu	Asp	Glu	Asp	Asp	Ser	Leu	Lys	Asp	Arg	Glu	Leu	Met	Val
				165					170					175	
Thr	Ser	Arg	Arg	Trp	Leu	Arg	Gly	Glu	Gly	Trp	Gly	Ser	Pro	Gln	Ala
			180					185					190		
Thr	Ala	Met	Val	Leu	Asn	Asn	Leu	Met	Tyr	Met	Thr	Ala	Lys	Tyr	Gly
		195					200					205			
Asp	Glu	Leu	Ala	Trp	Ser	Glu	Val	Glu	Asn	Val	Trp	Thr	Thr	Leu	Ala
	210					215					220				
Asp	Gly	Trp	Pro	Lys	Asn	Leu	Lys	Ile	Ile	Leu	His	Phe	Leu	Ile	Ser
225					230					235					240
Ile	Cys	Gly	Val	Asn	Ser	Glu	Pro	Ser	Leu	Leu	Pro	Tyr	Val	Lys	Lys
				245					250					255	
Val	Ile	Val	Tyr	Leu	Gly	Arg	Asp	Lys	Thr	Met	Gln	Leu	Leu	Glu	Glu
			260					265					270		
Leu	Val	Ser	Glu	Leu	Gln	Leu	Thr	Asp	Pro	Val	Ser	Ser	Gly	Val	Thr
		275					280					285			
His	Met	Asp	Asn	Pro	Pro	Tyr	Tyr	Arg	Ile	Thr	Ser	Ser	Tyr	Lys	Ile
	290					295					300				
Pro	Ser	Val	Thr	Ser	Glv	Thr	Thr	Ser	Ser	Ser	Asn	Thr	Met	Val	Ala

Pro Thr Asp Gly Asn Pro Asp Asn Lys Pro Ile Lys Glu Asn Ile Glu Glu Ser Tyr Val His Leu Asp Ile Tyr Ser Gly Leu Asn Ser His Leu Asn Arg Gln His His Arg Leu Glu Ser Arg Tyr Ser Ser Ser Gly Gly Ser Tyr Glu Glu Glu Lys Ser Asp Ser Met Pro Leu Tyr Ser Asn Trp Arg Leu Lys Val Met Glu His Asn Gln Gly Glu Pro Leu Pro Phe Pro Pro Ala Gly Gly Cys Trp Ser Pro Leu Val Asp Tyr Val Pro Glu Thr Ser Ser Pro Gly Leu Pro Leu His Arg Cys Asn Ile Ala Val Ile Leu Leu Thr Asp Leu Ile Ile Asp His Ser Val Lys Val Glu Trp Gly Ser Tyr Leu His Leu Leu His Ala Ile Phe Ile Gly Phe Asp His Cys His Pro Glu Val Tyr Glu His Cys Lys Arg Leu Leu His Leu Leu Ile Val Met Gly Pro Asn Ser Asn Ile Arg Thr Val Ala Ser Val Leu Leu Arg Asn Lys Glu Phe Asn Glu Pro Arg Val Leu Thr Val Lys Gln Val Ala His Leu Asp Tyr Asn Phe Thr Gly Ile Asn Asp Phe Ile Pro Asp Tyr Gln Pro Ser Pro Met Thr Asp Ser Gly Leu Ser Ser Ser

Ser	Thr	Ser	Ser	Ser	Ile	Ser	Leu	Gly	Asn	Asn	Ser	Ala	Ala	Ile	Ser
545					550					555					560
His	Leu	His	Thr	Thr	Ile	Leu	Asn	Glu	Val	Asp	Ile	Ser	Val	Glu	Gln
				565					570					575	
Asp	Gly	Lys	Val	Lys	Thr	Leu	Met	Glu	Phe	Ile	Thr	Ser	Arg	Lys	Arg
			580					585					590		
Gly	Pro	Leu	Trp	Asn	His	Glu	Asp	Val	Ser	Ala	Lys	Asn	Pro	Ser	Ile
		595					600					605			
Lys	Ser	Ala	Glu	Gln	Leu	Thr	Thr	Phe	Leu	Lys	His	Val	Val	Ser	Val
	610					615					620				
Phe	Lys	Gln	Ser	Ser	Ser	Glu	Gly	Ile	His	Leu	Glu	His	His	Leu	Ser
625					630					635					640
Glu	Val	Ala	Leu	Gln	Thr	Ala	Leu	Ser	Cys	Ser	Ser	Arg	His	Tyr	Ala
				645					650					655	
Gly	Arg	Ser	Phe	Gln	Ile	Phe	Arg	Ala	Leu	Lys	Gln	Pro	Leu	Thr	Ala
			660					665					670		
Thr	Thr	Leu	Ser	Asp	Val	Leu	Ser	Arg	Leu	Val	Glu	Thr	Val	Gly	Asp
		675					680					685			
Pro	Gly	Glu	Asp	Ala	Gln	Gly	Phe	Val	Ile	Glu	Leu	Leu	Leu	Thr	Leu
	690					695					700				
Glu	Ser	Ala	Ile	Asp	Thr	Leu	Ala	Glu	Thr	Met	Lys	His	Tyr	Asp	Leu
705					710					715					720
Leu	Ser	Ala	Leu	Ser	Gln	Thr	Ser	Tyr	His	Asp	Pro	Ile	Met	Gly	Asn
				725					730					735	
Arg	Tyr	Ala	Ala	Asn	Arg	Lys	Ser	Thr	Gly	Gln	Leu	Asn	Leu	Ser	Thr
			740					745					750		
Ser	Pro	Ile	Asn	Ser	Ser	Ser	Tyr	Leu	Gly	Tyr	Asn	Ser	Asn	Ala	Arg
		755					760					765			
Ser	Asn	Ser	Leu	Arø	Leu	Ser	Leu	Ile	Glv	Asn	Arø	Arg	Glv	Asp	Arg

Arg Arg Ser Asn Thr Leu Asp Ile Met Asp Gly Arg Ile Asn His Ser Ser Ser Leu Ala Arg Thr Arg Ser Leu Ser Ser Leu Arg Glu Lys Gly Met Tyr Asp Val Gln Ser Thr Thr Glu Pro Thr Asn Leu Met Ala Thr Ile Phe Trp Ile Ala Ala Ser Leu Leu Glu Ser Asp Tyr Glu Tyr Glu Tyr Leu Leu Ala Leu Arg Leu Leu Asn Lys Leu Leu Ile His Leu Pro Leu Asp Lys Ser Glu Ser Arg Glu Lys Ile Glu Asn Val Gln Ser Lys Leu Lys Trp Thr Asn Phe Pro Gly Leu Gln Gln Leu Phe Leu Lys Gly Phe Thr Ser Ala Ser Thr Gln Glu Met Thr Val His Leu Leu Ser Lys Leu Ile Ser Val Ser Lys His Thr Leu Val Asp Pro Ser Gln Leu Ser Gly Phe Pro Leu Asn Ile Leu Cys Leu Leu Pro His Leu Ile Gln His Phe Asp Ser Pro Thr Gln Phe Cys Lys Glu Thr Ala Ser Arg Ile Ala Lys Val Cys Ala Glu Glu Lys Cys Pro Thr Leu Val Asn Leu Ala His Met Met Ser Leu Tyr Ser Thr His Thr Tyr Ser Arg Asp Cys Ser Asn Trp Ile Asn Val Val Cys Arg Tyr Leu His Asp Ser Phe Ser Asp Thr

Thr	Phe	Asn	Leu	Val	Thr	Tyr	Leu	Ala	Glu	Leu	Leu	Glu	Lys	Gly	Leu
]	1010					1015					1020				
Ser	Ser	Met	Gln	Gln	Ser	Leu	Leu	Gln	Ile	Ile	Tyr	Ser	Leu	Leu	Ser
1025	5			-	1030					1035					1040
His	Ile	Asp	Leu	Ser	Ala	Ala	Pro	Ala	Lys	Gln	Phe	Asn	Leu	Glu	Ile
			-	1045]	1050					1055	
Ile	Lys	Ile	Ile	Gly	Lys	Tyr	Val	Gln	Ser	Pro	Tyr	Trp	Lys	Glu	Ala
			1060					1065				-	1070		
Leu	Asn	Ile	Leu	Lys	Leu	Val	Val	Ser	Arg	Ser	Ala	Ser	Leu	Val	Val
]	1075				-	1080]	1085			
Pro	Ser	Asp	Ile	Pro	Lys	Thr	Tyr	Gly	Gly	Asp	Thr	Gly	Ser	Pro	Glu
]	1090					1095					1100				
Ile	Ser	Phe	Thr	Lys	Ile	Phe	Asn	Asn	Val	Ser	Lys	Glu	Leu	Pro	Gly
1105	5			-	1110					1115				-	1120
Lys	Thr	Leu	Asp	Phe	His	Phe	Asp	Ile	Ser	Glu	Thr	Pro	Ile	Ile	Gly
				1125				-	1130					1135	
Asn	Lys	Tyr	Gly	Asp	Gln	His	Ser	Ala	Ala	Gly	Arg	Asn	Gly	Lys	Pro
			1140					1145					1150		
Lys	Val	Ile	Ala	Val	Thr	Arg	Ser	Thr	Ser	Ser	Thr	Ser	Ser	Gly	Ser
]	1155					1160				-	1165			
Asn	Ser	Asn	Ala	Leu	Val	Pro	Val	Ser	Trp	Lys	Arg	Pro	Gln	Leu	Ser
]	1170					1175					1180				
Gln	Arg	Arg	Thr	Arg	Glu	Lys	Leu	Met	Asn	Val	Leu	Ser	Leu	Cys	Gly
1185	5				1190					1195					1200
Pro	Glu	Ser	Gly	Leu	Pro	Lys	Asn	Pro	Ser	Val	Val	Phe	Ser	Ser	Asn
				1205				-	1210					1215	
Glu	Asp	Leu	Glu	Val	Gly	Asp	Gln	Gln	Thr	Ser	Leu	Ile	Ser	Thr	Thr
			1220				-	1225					1230		
Glu	Asp	Ile	Asn	Gln	Glu	Glu	Glu	Val	Ala	Val	Glu	Asp	Asn	Ser	Ser

Glu Gln Gln Phe Gly Val Phe Lys Asp Phe Asp Phe Leu Asp Val Glu Leu Glu Asp Ala Glu Gly Glu Ser Met Asp Asn Phe Asn Trp Gly Val Arg Arg Arg Ser Leu Asp Ser Ile Asp Lys Gly Asp Thr Pro Ser Leu Gln Glu Tyr Gln Cys Ser Ser Ser Thr Pro Ser Leu Asn Leu Thr Asn Gln Glu Asp Thr Asp Glu Ser Ser Glu Glu Glu Ala Ala Leu Thr Ala Ser Gln Ile Leu Ser Arg Thr Gln Met Leu Asn Ser Asp Ser Ala Thr Asp Glu Thr Ile Pro Asp His Pro Asp Leu Leu Gln Ser Glu Asp Ser Thr Gly Ser Ile Thr Thr Glu Glu Val Leu Gln Ile Arg Asp Glu Thr Pro Thr Leu Glu Ala Ser Leu Asp Asn Ala Asn Ser Arg Leu Pro Glu Asp Thr Thr Ser Val Leu Lys Glu Glu His Val Thr Thr Phe Glu Asp Glu Gly Ser Tyr Ile Ile Leu Pro Glu Gly Gln Thr Ser Lys Thr Ser Pro Gly Ala Thr Thr Leu Val Ile

<210> 3734

<211> 170

<212> PRT

<213> Homo sapiens

<400> 3734

Met Met Val Ala Leu Val Arg Ile Cys Cys Arg Phe Ser Leu Phe Leu

1 5 10 15

His Leu Ser Arg Leu Leu Pro Ser Ser Trp Gly Arg Ala Glu Lys Ile

20 25 30

Gly Glu Ala Arg Glu Leu Arg Lys Ala Arg Glu Pro Leu Leu Ser

35 40 45

Thr Ser Ser Gly Leu Phe Leu Gly Thr Leu Gly Gln Ser Gly Ser Leu

50 55 60

His Trp Gly Pro Leu Leu Pro Pro Pro Pro Glu Ala Ser Thr Pro Phe

65 70 75 80

Leu Pro Pro Pro Arg Gln Ala Ser Thr Pro Ser Ala Leu Leu Ser Leu

85 90 95

Thr Trp Lys Arg Ser Pro Gly Arg Val Ala Ser Gly Lys Thr Val Ala

100 105 110

Ser Gln Ala Ser Gly Leu Arg Gln Val Gly Val Gln Ile Arg Gly Leu

115 120 125

Ala Ser Leu Gln Gly Leu Pro His Arg His Pro Asn Pro Phe Leu Asp

130 135 140

Met Arg Gly Asp Leu Leu Ser Pro Pro Ser Arg Thr Pro Ala Pro

145 150 155 160

Leu Phe Arg Asn Pro Ser Leu Ala Phe Ser

165 170

<210> 3735

<211> 242

<212> PRT

<213> Homo sapiens

20

<400> 3735

Met Trp Leu Gln Pro Leu Leu Ala Ala Ile Arg Glu Asp Arg His Thr

1 5 10 15

Val Val Cys Pro Val Ile Asp Ile Ile Ser Ala Asp Thr Leu Ala Tyr

25

30

Ser Ser Ser Pro Val Val Arg Gly Gly Phe Asn Trp Gly Leu His Phe
35 40 45

Lys Trp Asp Leu Val Pro Leu Ser Glu Leu Gly Arg Ala Glu Gly Ala
50 55 60

Thr Ala Pro Ile Lys Ser Pro Thr Met Ala Gly Gly Leu Phe Ala Met
65 70 75 80

Asn Arg Gln Tyr Phe His Glu Leu Gly Gln Tyr Asp Ser Gly Met Asp

85

90

95

Ile Trp Gly Gly Glu Asn Leu Glu Ile Ser Phe Arg Ile Trp Met Cys
100 105 110

Gly Gly Lys Leu Phe Ile Ile Pro Cys Ser Arg Val Gly His Ile Phe
115 120 125

Arg Lys Arg Arg Pro Tyr Gly Ser Pro Glu Gly Gln Asp Thr Met Thr
130 135 140

His Asn Ser Leu Arg Leu Ala His Val Trp Leu Asp Glu Tyr Lys Glu 145 150 155 160

Gln Tyr Phe Ser Leu Arg Pro Asp Leu Lys Thr Lys Ser Tyr Gly Asn 165 170 175

Ile Ser Glu Arg Val Glu Leu Arg Lys Lys Leu Gly Cys Lys Ser Phe 180 185 190 Lys Trp Tyr Leu Asp Asn Val Tyr Pro Glu Met Gln Ile Ser Gly Ser

195

200

205

His Ala Lys Pro Gln Gln Pro Ile Phe Val Asn Arg Gly Pro Lys Arg

210

215

220

Pro Lys Val Leu Gln Arg Gly Arg Val Arg Lys Leu Phe Phe Pro Ser

225

230

235

240

Gly Leu

<210> 3736

<211> 487

<212> PRT

<213> Homo sapiens

<400> 3736

Met Leu Ser Arg Arg Tyr Glu Gly Glu Ile Pro Lys Asn Ile Cys Lys

1 5 10 15

Arg Lys Lys Thr Val His Gln Val Thr Glu Asn Ala Ser Asp Ala Asp
20 25 30

Leu Trp Leu Leu Asn Ser Cys Thr Val Lys Asn Pro Ala Glu Asp His

35 40 45

Phe Arg Asn Ser Ile Lys Lys Ala Gln Glu Glu Asn Lys Lys Ile Val
50 55 60

Leu Ala Gly Cys Val Pro Gln Ala Gln Pro Arg Gln Asp Tyr Leu Lys
65 70 75 80

Gly Leu Ser Ile Ile Gly Val Gln Gln Ile Asp Arg Val Val Glu Val
85 90 95

Val Glu Glu Thr Ile Lys Gly His Ser Val Arg Leu Leu Gly Gln Lys

			100					105					110		
Lys	Asp	Asn	Gly	Arg	Arg	Leu	Gly	Gly	Ala	Arg	Leu	Asp	Leu	Pro	Lys
		115					120					125			
Ile	Arg	Lys	Asn	Pro	Leu	Ile	Glu	Ile	Ile	Ser	Ile	Asn	Thr	Gly	Cys
	130					135					140				
Leu	Asn	Ala	Cys	Thr	Tyr	Cys	Lys	Thr	Lys	His	Ala	Arg	Gly	Asn	Leu
145					150					155					160
Ala	Ser	Tyr	Pro	Ile	Asp	Glu	Leu	Val	Asp	Arg	Ala	Lys	Gln	Ser	Phe
				165					170					175	
Gln	Glu	Gly	Val	Cys	Glu	Ile	Trp	Leu	Thr	Ser	Glu	Asp	Thr	Gly	Ala
			180					185					190		
Tyr	Gly	Arg	Asp	Ile	Gly	Thr	Asn	Leu	Pro	Thr	Leu	Leu	Trp	Lys	Leu
		195					200					205			
Val	Glu	Val	Ile	Pro	Glu	Gly	Ala	Met	Leu	Arg	Leu	Gly	Met	Thr	Asn
	210					215					220				
Pro	Pro	Tyr	Ile	Leu	Glu	His	Leu	Glu	Glu	Met	Ala	Lys	Ile	Leu	Asn
225					230					235					240
His	Pro	Arg	Val	Tyr	Ala	Phe	Leu	His	Ile	Pro	Val	Gln	Ser	Ala	Ser
				245					250					255	
Asp	Ser	Val	Leu	Met	Glu	Met	Lys	Arg	Glu	Tyr	Cys	Val	Ala	Asp	Phe
			260					265					270		
Lys	Arg	Val	Val	Asp	Phe	Leu	Lys	Glu	Lys	Val	Pro	Gly	Ile	Thr	Ile
		275					280					285			
Ala	Thr	Asp	Ile	Ile	Cys	Gly	Phe	Pro	Gly	Glu	Thr	Asp	Gln	Asp	Phe
	290					295					300				
Gln	Glu	Thr	Val	Lys	Leu	Val	Glu	Glu	Tyr	Lys	Phe	Pro	Ser	Leu	Phe
305					310					315					320
Ile	Asn	Gln	Phe	Tyr	Pro	Arg	Pro	Gly	Thr	Pro	Ala	Ala	Lys	Met	Glu
				325					330					335	

Gln Val Pro Ala Gln Val Ile Gly Glu Arg Gln Gln Val Leu Val Thr Glu Glu Ser Phe Asp Ser Lys Phe Tyr Val Ala His Asn Gln Phe Tyr Glu Gln Val Leu Val Pro Lys Asn Pro Ala Phe Met Gly Lys Met Val Glu Val Asp Ile Tyr Glu Ser Gly Lys His Phe Met Lys Gly Gln Pro Val Ser Asp Ala Lys Val Tyr Thr Pro Ser Ile Ser Lys Pro Leu Ala Lys Gly Glu Val Ser Gly Leu Thr Lys Asp Phe Arg Asn Gly Leu Gly Asn Gln Leu Ser Ser Gly Ser His Thr Ser Ala Ala Ser Gln Cys Asp Ser Ala Ser Ser Arg Met Val Leu Pro Met Pro Arg Leu His Gln Asp Cys Ala Leu Arg Met Ser Val Gly Leu Ala Leu Leu Gly Leu Leu Phe Ala Phe Phe Cys Gln Gly Leu

<211> 408

<210> 3737

<212> PRT

<213> Homo sapiens

<400> 3737

Met Val Gln Asn Gly Tyr Tyr Glu Glu Thr Asp Tyr Ser Ala Leu Asp

1				5					10					15	
Gly	Thr	Ile	Asn	Ala	His	Tyr	Thr	Ser	Arg	Asp	Glu	Leu	Met	Glu	Glu
			20					25					30		
Arg	Leu	Thr	Lys	Ser	Glu	Lys	Ile	Asn	Ser	Asp	Tyr	Leu	Arg	Asp	Gly
		35					40					45			
Ile	Asn	Met	Pro	Thr	Val	Cys	Thr	Ser	Gly	Cys	Leu	Ser	Phe	Pro	Ser
	50					55					60				
Ala	Pro	Arg	Glu	Ser	Pro	Cys	Asn	Val	Lys	Tyr	Ser	Ser	Lys	Ser	Lys
65					70					75					80
Phe	Asp	Ala	Ile	Thr	Lys	Gln	Pro	Ser	Ser	Thr	Ser	Tyr	Asn	Phe	Thr
				85					90					95	
Ser	Ser	Ile	Ser	Trp	Tyr	Glu	Ser	Ser	Pro	Lys	Pro	Gln	Ile	Gln	Ala
			100					105					110		
Phe	Leu	Gln	Ala	Lys	Glu	Glu	Leu	Lys	Leu	Leu	Lys	Leu	Pro	Gly	Phe
		115					120					125			
Met	Tyr	Ser	Glu	Val	Pro	Leu	Leu	Ala	Ser	Ser	Val	Pro	Tyr	Phe	Ser
	130					135					140				
Val	Glu	Glu	Glu	Asp	Gly	Ser	Glu	Asp	Gly	Val	His	Leu	Ile	Val	Cys
145					150					155					160
Val	His	Gly	Leu	Asp	Gly	Asn	Ser	Ala	Asp	Leu	Arg	Leu	Val	Lys	Thi
				165					170					175	
Tyr	Ile	Glu	Leu	Gly	Leu	Pro	Gly	Gly	Arg	Ile	Asp	Phe	Leu	Met	Sei
			180					185					190		
Glu	Arg	Asn	Gln	Asn	Asp	Thr	Phe	Ala	Asp	Phe	Asp	Ser	Met	Thr	Asp
		195					200					205			
Arg	Leu	Leu	Asp	Glu	Ile	Ile	Gln	Tyr	Ile	Gln	Ile	Tyr	Ser	Leu	Thi
	210					215					220				
Val	Ser	Lys	Ile	Ser	Phe	Ile	Gly	His	Ser	Leu	Gly	Asn	Leu	Ile	Ιlϵ
225					230					235					240

Arg	Ser	Val	Leu	Thr	Arg	Pro	Arg	Phe	Lys	Tyr	Tyr	Leu	Asn	Lys	Leu
				245					250					255	
His	Thr	Phe	Leu	Ser	Leu	Ser	Gly	Pro	His	Leu	Gly	Thr	Leu	Tyr	Asn
			260					265					270		
Ser	Ser	Ala	Leu	Val	Asn	Thr	Gly	Leu	Trp	Phe	Met	Gln	Lys	Trp	Lys
		275					280					285			
Lys	Ser	Gly	Ser	Leu	Leu	Gln	Leu	Thr	Cys	Arg	Asp	His	Ser	Asp	Pro
	290					295					300				
Arg	Gln	Thr	Phe	Leu	Tyr	Lys	Leu	Ser	Asn	Lys	Ala	Gly	Leu	His	Tyr
305					310					315					320
Phe	Lys	Asn	Val	Val	Leu	Val	Gly	Ser	Leu	Gln	Asp	Arg	Tyr	Val	Pro
				325					330					335	
Tyr	His	Ser	Ala	Arg	Ile	Glu	Met	Cys	Lys	Thr	Ala	Leu	Lys	Asp	Lys
			340					345					350		
Gln	Ser	Gly	Gln	Ile	Tyr	Ser	Glu	Met	Ile	His	Asn	Leu	Leu	Arg	Pro
		355					360					365			
Val	Leu	Gln	Ser	Lys	Asp	Cys	Asn	Leu	Val	Arg	Tyr	Asn	Val	Ile	Asn
	370					375					380				
Ala	Leu	Pro	Asn	Thr	Ala	Asp	Ser	Leu	Ile	Gly	Arg	Ala	Ala	His	Ile
385					390					395					400
Ala	Val	Leu	Ile	Arg	Lys	Tyr	Phe								

<210> 3738

<211> 131

<212> PRT

<213> Homo sapiens

405

<400> 3738

Met His Tyr Cys Lys Ser Leu Ile Thr Ser Thr Met Phe Thr Ala Ser

1 5 10 15

Ser Leu Val Asp Phe Leu Leu Lys Asn His Ile Ala His Ser Gln Glu

20 25 30

Pro Met Pro Gln Gln Phe Thr Phe Ser His Glu Thr Ala Val Ile Gln

35 40 45

Ser His Pro Gln Ala Pro Cys Leu Ile Leu Val His Leu Leu Val Pro

50 55 60

Pro His Leu Gln Leu Leu Pro Leu Leu Lys Ser Trp Asn Glu Leu Leu

65 70 75 80

Pro Asn Ser Cys Ser Cys Cys Ile Leu Thr Ser Phe His Glu Ser Pro

85 90 95

Met Phe Leu Met Ala Ser Arg Met Val Asn Pro Phe Leu Arg Val Phe

100 105 110

Asn Val Leu Cys Pro Asp Pro Ser Glu Glu Pro Leu Pro Val Thr Ala

115 120 125

Lys Ala Leu

130

<210> 3739

<211> 627

<212> PRT

<213> Homo sapiens

<400> 3739

Met Lys Lys Arg Arg Lys Val Thr Ser Asn Leu Glu Lys Ile His Leu

1 5 10 15

Gly	Tyr	His	Lys	Asp	Ser	Ser	Glu	Gly	Asn	Val	Ala	Val	Glu	Cys	Asp
			20					25					30		
Gln	Val	Thr	Tyr	Thr	His	Ser	Ala	Gly	Arg	Pro	Thr	Pro	Glu	Ala	Leu
		35					40					45			
His	Cys	Tyr	Gln	Glu	Leu	Pro	Pro	Ser	Pro	Asp	Gln	Arg	Lys	Leu	Leu
	50					55					60				
Ser	Ser	Leu	Gln	Tyr	Asn	Lys	Asn	Leu	Leu	Lys	Tyr	Leu	Asn	Asp	Asp
65					70					75					80
Arg	Gln	Lys	Gln	Pro	Ser	Phe	Cys	Asp	Leu	Leu	Ile	Ile	Val	Glu	Gly
				85					90					95	
Lys	Glu	Phe	Ser	Ala	His	Lys	Val	Val	Val	Ala	Val	Gly	Ser	Ser	Tyr
			100					105					110		
Phe	His	Ala	Cys	Leu	Ser	Lys	Asn	Pro	Ser	Thr	Asp	Val	Val	Thr	Leu
		115					120					125			
Asp	His	Val	Thr	His	Ser	Val	Phe	Gln	His	Leu	Leu	Glu	Phe	Leu	Tyr
	130					135					140				
Thr	Ser	Glu	Phe	Phe	Val	Tyr	Lys	Tyr	Glu	Ile	Pro	Leu	Val	Leu	Glu
145					150					155					160
Ala	Ala	Lys	Phe	Leu	Asp	Ile	Ile	Asp	Ala	Val	Lys	Leu	Leu	Asn	Asn
				165					170					175	
Glu	Asn	Val	Ala	Pro	Leu	His	Ser	Glu	Leu	Thr	Glu	Lys	Ser	Ser	Pro
			180					185					190		
Glu	Glu	Thr	Leu	Asn	Glu	Leu	Thr	Gly	Arg	Leu	Ser	Asn	Asn	His	Gln
		195					200					205			
Cys	Lys	Phe	Cys	Ser	Arg	His	Phe	Cys	Tyr	Lys	Lys	Ser	Leu	Glu	Asn
	210					215					220				
His	Leu	Ala	Lys	Thr	His	Arg	Ser	Leu	Leu	Leu	Gly	Lys	Lys	His	Gly
225					230					235					240
Leu	Lys	Met	Leu	Glu	Arg	Ser	Phe	Ser	Ala	Arg	Arg	Ser	Lys	Arg	Asn

				245					250					255		
Arg	Lys	Cys	Pro	Val	Lys	Phe	Asp	Asp	Thr	Ser	Asp	Asp	Glu	Gln	Glu	
			260					265					270			
Ser	Gly	Asp	Gly	Ser	Asp	Asn	Leu	Asn	Gln	Glu	Asn	Phe	Asp	Lys	Glu	
		275					280					285				
Lys	Ser	Asp	Arg	Asn	Asp	Ser	Glu	Asp	Pro	Gly	Ser	Glu	Tyr	Asn	Ala	
	290					295					300					
Glu	Glu	Asp	Glu	Leu	Glu	Glu	Glu	Met	Ser	Asp	Glu	Tyr	Ser	Asp	Ile	
305					310					315					320	
Glu	Glu	Gln	Ser	Glu	Lys	Asp	His	Asn	Asp	Ala	Glu	Glu	Glu	Pro	Glu	
				325					330					335		
Ala	Gly	Asp	Ser	Val	Gly	Asn	Val	His	Glu	Gly	Leu	Thr	Pro	Val	Val	
			340					345					350			
Ile	Gln	Asn	Ser	Asn	Lys	Lys	Ile	Leu	Gln	Cys	Pro	Lys	Cys	Asp	Lys	
		355					360					365				
Thr	Phe	Asp	Arg	Ile	Gly	Lys	Tyr	Glu	Ser	His	Thr	Arg	Val	His	Thr	
	370					375					380					
Gly	Glu	Lys	Pro	Phe	Glu	Cys	Asp	Ile	Cys	His	Gln	Arg	Tyr	Ser	Thr	
385					390					395					400	
Lys	Ser	Asn	Leu	Thr	Val	His	Arg	Lys	Lys	His	Ser	Asn	Glu	Thr	Glu	
				405					410					415		
Phe	His	Lys	Lys	Glu	His	Lys	Cys	Pro	Tyr	Cys	Asn	Lys	Leu	His	Ala	
			420					425					430			
Ser	Lys	Lys	Thr	Leu	Ala	Lys	His	Val	Lys	Arg	Phe	His	Pro	Glu	Asn	
		435					440					445				
Ala	Gln	Glu	Phe	Ile	Ser	Ile	Lys	Lys	Thr	Lys	Ser	Glu	Ser	Trp	Lys	
	450					455					460					
Cys	Asp	Ile	Cys	Lys	Lys	Ser	Phe	Thr	Arg		Pro	His	Leu	Glu		
465					470					475					480	

His Met Ile Leu His Ser Gln Asp Lys Pro Phe Lys Cys Thr Tyr Cys
485 490 495

Glu Glu His Phe Lys Ser Arg Phe Ala Arg Leu Lys His Gln Glu Lys
500 505 510

Phe His Leu Gly Pro Phe Pro Cys Asp Ile Cys Gly Arg Gln Phe Asn 515 520 525

Asp Thr Gly Asn Leu Lys Arg His Ile Glu Cys Thr His Gly Gly Lys 530 535 540

Arg Lys Trp Thr Cys Phe Ile Cys Gly Lys Ser Val Arg Glu Arg Thr
545 550 555 560

Thr Leu Lys Glu His Leu Arg Ile His Ser Gly Glu Lys Pro His Leu 565 570 575

Cys Ser Ile Cys Gly Gln Ser Phe Arg His Gly Ser Ser Tyr Arg Leu
580 585 590

His Leu Arg Val His His Asp Asp Lys Arg Tyr Glu Cys Asp Glu Cys 595 600 605

Gly Lys Thr Phe Ile Arg His Asp His Leu Thr Lys His Lys Lys Ile 610 615 620

His Ser Asp

625

<210> 3740

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3740

Met Glu Pro Gly Glu Leu Lys Ser Trp Pro Ile Pro Pro Pro Val Pro

Ala Ala Lys Ile Glu Lys Asp Arg Thr Val Met Pro Cys Gly Thr Val Val Thr Thr Val Thr Ala Val Lys Thr Lys Pro Arg Val Asp Val Gly Arg Ala Ser Pro Leu Ser Ser Asp Ser Pro Val Lys Thr Pro Ile Lys Val Lys Val Ile Glu Lys Asp Ile Ser Val Gln Ala Ile Ala Cys Arg Ser Ala Pro Val Ser Lys Thr Leu Ser Ser Ser Asp Thr Glu Leu Leu Val Leu Asn Gly Ser Asp Pro Val Ala Glu Val Ala Ile Arg Gln Leu Ser Glu Ser Ser Lys Leu Lys Leu Lys Ser Pro Arg Lys Lys Ser Thr Ile Ile Ile Ser Gly Ile Ser Lys Thr Ser Leu Ser Gln Asp His Asp Ala Ala Leu Met Gln Gly Tyr Thr Ala Ser Val Asp Ser Thr His Arg Glu Asp Ala Pro Ser His Pro Glu Arg Ala Ala Ala Ser Ala Pro Pro Glu Glu Ala Glu Ser Ala Gln Ala Ser Leu Ala Pro Lys Pro Gln Glu Asp Glu Leu Asp Ser Trp Asp Leu Glu Lys Glu Pro Gln Ala Ala Ala Trp Ser Ser Gln Val Leu Leu Asp Pro Asp Gly Asp Glu Leu Ser Glu Ser Ser Met Ser Val Leu Glu Pro Gly Thr Ala Lys Lys His Lys Gly

Gly Ile Leu Arg Lys Gly Ala Lys Leu Phe Phe Arg Arg His Gln Gln Lys Asp Pro Gly Met Ser Gln Ser His Asn Asp Leu Val Phe Leu Glu Gln Pro Glu Gly Ser Arg Arg Lys Gly Ile Thr Leu Thr Arg Ile Leu Asn Lys Lys Leu Leu Ser Arg His Arg Asn Lys Asn Thr Met Asn Gly Ala Pro Val Glu Pro Cys Thr

<210> 3741

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3741

Met Met Asn Val Tyr Ile Leu His Met Cys Val Cys Val Ile Lys Cys Gln Ala Gly Val Ala Glu Leu Ser Trp Gln Asn Met Arg Val Tyr Ile Pro Ala Gly Cys Arg Gly Met Ser Ser Ser Val Gly Cys Ile Ala Gly Ala Ser Ala Glu Lys Gly Glu Ile Phe Thr Leu Pro Leu Thr Ser Pro Gly His Phe Pro Leu Pro Leu Trp Thr Ser Val Cys Ser Ser Val Glu Trp Asp Asn Ser Ala Ser Pro Ala Tyr Tyr Leu Gly Leu Cys Asp Ala

 Cys
 Arg
 Cys
 Thr
 Gly
 Lys
 Ala
 Leu
 Met
 Gly
 Ala
 Ala
 Glu
 Val
 Ser

 Arg
 Gly
 Gly
 Gly
 Gly
 Ala
 Ser
 Ser
 Pro
 Gly
 Leu
 Ser
 Gly
 Arg
 Trp

 Cys
 Arg
 Glu
 Arg
 Ile
 Ser
 Phe
 Cys
 Gly
 Ser
 Ser

 130
 135
 135
 140

<210> 3742

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3742

Met Val Ile Val Ser Pro Arg Val His Gly Ser Tyr Glu His Leu Trp

1 5 10 15

Ala Gly Gln Val Ala Asp Ala Leu Val Asp Leu Thr Gly Gly Leu Ala
20 25 30

Glu Arg Trp Asn Leu Lys Gly Val Ala Gly Ser Gly Gly Gln Gln Asp
35 40 45

Arg Pro Gly Arg Trp Glu His Arg Thr Cys Arg Gln Leu Leu His Leu
50 55 60

Lys Asp Gln Cys Leu Ile Ser Cys Cys Val Leu Ser Pro Arg Ala Gly
65 70 75 80

Ala Arg Glu Leu Gly Glu Phe His Ala Phe Ile Val Ser Asp Leu Arg 85 90 95

Glu Leu Gln Gly Gln Ala Gly Gln Cys Ile Leu Leu Leu Arg Ile Gln 100 105 110

Asn Pro Trp	Gly Arg	Arg Cys	Trp Gln	Gly Leu	Trp Arg	Glu Gly Gly
115			120	•	125	
Glu Gly Trp	Ser Gln	Val Asp	Ala Ala	Val Ala	Ser Glu	Leu Leu Ser
130		135			140	
Gln Leu Gln	Glu Gly	Glu Phe	Trp Val	Glu Glu	Glu Glu	Phe Leu Arg
145		150		155		160
Glu Phe Asp	Glu Leu	Thr Val	Gly Tyr	Pro Val	Thr Glu	Ala Gly His
	165			170		175
Leu Gln Ser	Leu Tyr	Thr Glu	Arg Leu	Leu Cys	His Thr	Arg Ala Leu
	180		185			190
Pro Gly Ala	Trp Val	Lys Gly	Gln Ser	Ala Gly	Gly Cys	Arg Asn Asn
195			200		205	
Ser Gly Phe	Pro Ser	Asn Pro	Lys Phe	Trp Leu	Arg Val	Ser Glu Pro
210		215			220	
Ser Glu Val	Tyr Ile	Ala Val	Leu Gln	Arg Ser	Arg Leu	His Ala Ala
225		230		235		240
Asp Trp Ala	Gly Arg	Ala Arg	Ala Leu	Val Gly	Asp Ser	His Thr Ser
	245			250		255
Trp Ser Pro	Ala Ser	Ile Pro	Gly Lys	His Tyr	Gln Ala	Val Gly Leu
	260		265			270
His Leu Trp	Lys Gly	Val Thr	Leu Gly	Thr Thr	Leu Phe	Pro Val Pro
275			280		285	
Ser Trp Met	Trp Pro	Thr				
290						

<210> 3743

<211> 599

<212> PRT

<213> Homo sapiens

<400> 3743

Met Ala Pro Ala Leu Gly Arg Val Gly Lys Val Val Lys Val Phe Gly

1 5 10 15

Asp Gly Asn Leu Arg Val Ala Val Ala Gly Gln Arg Trp Thr Phe Ser
20 25 30

Pro Ser Cys Leu Val Ala Tyr Arg Pro Glu Glu Asp Ala Asn Leu Asp
35 40 45

Val Ala Glu Arg Ala Arg Glu Asn Lys Ser Ser Leu Ser Val Ala Leu
50 55 60

Asp Lys Leu Arg Ala Gln Lys Ser Asp Pro Glu His Pro Gly Arg Leu 65 70 75 80

Val Val Glu Val Ala Leu Gly Asn Ala Ala Arg Ala Leu Asp Leu Leu

85 90 95

Arg Arg Pro Glu Gln Val Asp Thr Lys Asn Gln Gly Arg Thr Ala
100 105 110

Leu Gln Val Ala Ala Tyr Leu Gly Gln Val Glu Leu Ile Arg Leu Leu
115 120 125

Leu Gln Ala Arg Ala Gly Val Asp Leu Pro Asp Asp Glu Gly Asn Thr
130 135 140

Ala Leu His Tyr Ala Ala Leu Gly Asn Gln Pro Glu Ala Thr Arg Val 145 150 155 160

Leu Leu Ser Ala Gly Cys Arg Ala Asp Ala Ile Asn Ser Thr Gln Ser 165 170 175

Thr Ala Leu His Val Ala Val Gln Arg Gly Phe Leu Glu Val Val Arg
180 185 190

Ala Leu Cys Glu Arg Gly Cys Asp Val Asn Leu Pro Asp Ala His Ser 195 200 205

Asp	Thr	Pro	Leu	His	Ser	Ala	Ile	Ser	Ala	Gly	Thr	Gly	Ala	Ser	Gly
	210					215					220				
Ile	Val	Glu	Val	Leu	Thr	Glu	Val	Pro	Asn	Ile	Asp	Val	Thr	Ala	Thr
225					230					235					240
Asn	Ser	Gln	Gly	Phe	Thr	Leu	Leu	His	His	Ala	Ser	Leu	Lys	Gly	His
				245					250					255	
Ala	Leu	Ala	Val	Arg	Lys	Ile	Leu	Ala	Arg	Ala	Arg	Gln	Leu	Val	Asp
			260					265					270		
Ala	Lys	Lys	Glu	Asp	Gly	Phe	Thr	Ala	Leu	His	Leu	Ala	Ala	Leu	Asn
		275					280					285			
Asn	His	Arg	Glu	Val	Ala	Gln	Ile	Leu	Ile	Arg	Glu	Gly	Arg	Cys	Asp
	290					295					300				
Val	Asn	Val	Arg	Asn	Arg	Lys	Leu	Gln	Ser	Pro	Leu	His	Leu	Ala	Val
305					310					315					320
Gln	Gln	Ala	His	Val	Gly	Leu	Val	Pro	Leu	Leu	Val	Asp	Ala	Gly	Cys
				325					330					335	
Ser	Val	Asn	Ala	Glu	Asp	Glu	Glu	Gly	Asp	Thr	Ala	Leu	His	Val	Ala
			340					345					350		
Leu	Gln	Arg	His	Gln	Leu	Leu	Pro	Leu	Val	Ala	Asp	Gly	Ala	Gly	Gly
		355					360					365			
Asp	Pro	Gly	Pro	Leu	Gln	Leu	Leu	Ser	Arg	Leu	Gln	Ala	Ser	Gly	Leu
	370					375					380				
Pro	Gly	Ser	Ala	Glu	Leu	Thr	Val	Gly	Ala	Ala	Val	Ala	Cys	Phe	Leu
385					390					395					400
Ala	Leu	Glu	Gly	Ala	Asp	Val	Ser	Tyr	Thr	Asn	His	Arg	Gly	Arg	Sei
				405					410					415	
Pro	Leu	Asp	Leu	Ala	Ala	Glu	Gly	Arg	Val	Leu	Lys	Ala	Leu	Gln	Gly
			420					425					430		
Cys	Ala	Gln	Arg	Phe	Arg	Glu	Arg	Gln	Ala	Glv	Gly	Gly	Ala	Ala	Pro

Gly Pro Arg Gln Thr Leu Gly Thr Pro Asn Thr Val Thr Asn Leu His Val Gly Ala Ala Pro Gly Pro Glu Ala Ala Glu Cys Leu Val Cys Ser Glu Leu Ala Leu Leu Val Leu Phe Ser Pro Cys Gln His Arg Thr Val Cys Glu Glu Cys Ala Arg Arg Met Lys Lys Cys Ile Arg Cys Gln Val Val Val Ser Lys Lys Leu Arg Pro Asp Gly Ser Glu Val Ala Ser Ala Ala Pro Ala Pro Gly Pro Pro Arg Gln Leu Val Glu Glu Leu Gln Ser Arg Tyr Arg Gln Met Glu Glu Arg Ile Thr Cys Pro Ile Cys Ile Asp Ser His Ile Arg Leu Val Phe Gln Cys Gly His Gly Ala Cys Ala Pro Cys Gly Ser Ala Leu Ser Ala Cys Pro Val Cys Arg Gln Pro Ile Arg Asp Arg Ile Gln Ile Phe Val

<210> 3744

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3744

Met Ser His Arg Ala Gln Leu Ile Phe Val Phe Leu Phe Tyr Leu Phe 1 5 10 15 Ile Tyr Phe Leu Gly Asp Gly Val Leu Leu Cys His Pro Gly Trp Ser 20 25 30 Ala Val Val Arg Ser Trp Leu Thr Ala Thr Ser Ala Ser Gln Val Ala 35 40 45 Gly Ile Thr Gly Met His His His Ala Gln Leu Ile Phe Val Phe Leu 60 50 55 Val Glu Met Gly Phe His Cys Val Gly Gln Ala Gly Leu Glu Leu Leu 75 70 80 65 Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Ile 85 90 95 Gly Val Ser His Cys Thr Arg Pro Asn Phe Cys Ile Phe Ser Arg Asp 100 105 110 Gly Val Ser Pro Cys Trp Leu Ser Trp Ser Gly Thr His Gly Leu Lys 115 120 125 Leu Ser Ala His Leu Ser Leu Pro Lys Cys 130 135

<210> 3745

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3745

Met Val Thr Leu Glu Val Lys Gly Ser Arg Ile Leu Leu Tyr Leu Asp

1 5 10 15

Ser Asn Phe Ser Leu Met Ala Lys Pro Leu Asp Gly Val Thr Lys Gly

Glu Glu Lys Glu Pro Leu Leu Trp Glu Thr Ala Gly Glu Gly Ala Leu Pro Gly Glu Asn Leu Leu Ile Asp Phe Thr Glu Pro Pro Arg Ala Gly Gly Tyr Trp Phe Met Leu Val Leu Val Cys Thr Phe Ser Gly Cys Tyr Val Leu Asp Pro Pro Gln Ser Ala Asn Thr Gly Ser Ser Gly Gln Val Asn Gln Pro Ala Gly Pro Arg Ser Ser Asn Leu Ala Asp Pro

<210> 3746

<211> 1300

<212> PRT

<213> Homo sapiens

<400> 3746

Met Asn Ser Asn His Cys Tyr Tyr Lys His Pro Lys Val Gln Glu Lys Ala Leu Trp Arg Arg Glu Val Leu Val Glu Ala Glu Leu Asp Glu Ser Tyr Pro Asn Pro Thr Cys Tyr His Cys Lys Asn Lys Cys Leu Pro Gly Lys Val Pro Ala Glu His Ile Thr Asp Ile Glu Asp Phe His His Leu Arg Phe Arg Tyr Lys Tyr Thr Cys Asp Asp Pro Asp Tyr Pro Trp

Ser	Asp	Trp	Val	Asn	Tyr	Asp	Val	Phe	Leu	Ala	Thr	Met	Thr	Thr	Lys
				85					90					95	
Phe	Asn	Glu	Phe	Arg	Lys	Arg	Glu	Ser	Ile	Met	Phe	Gln	Arg	Arg	Πle
			100					105					110		
Ala	Gln	Asn	Asn	Ala	Val	Thr	Leu	Pro	Ser	Ser	Phe	Asn	Met	Asn	Gly
		115					120					125			
Ala	Ser	Ile	Lys	Arg	Glu	Trp	Ile	Ala	Ala	Val	Ala	Glu	Arg	Thr	Arg
	130					135					140				
Met	Arg	Lys	Ser	Tyr	Val	Asn	Arg	Val	Ala	Glu	Ala	Val	Ser	Gly	Glu
145					150					155					160
Leu	His	Asn	Ala	Leu	Ser	Val	Thr	Lys	Asp	Lys	Leu	Glu	Ser	Thr	Phe
				165					170					175	
Lys	Asn	Leu	Phe	Val	Trp	Thr	Asp	Glu	Thr	Arg	Pro	Asn	Asp	Asn	Cys
			180					185					190		
Glu	Asp	Cys	Ala	Ile	Val	Lys	Met	Lys	Cys	Ala	Lys	Cys	Lys	Tyr	Trp
		195					200					205			
Ala	Ser	Asp	Ile	Cys	Ile	Glu	Lys	Phe	Lys	Lys	Glu	Met	Ala	Pro	Ala
	210					215					220				
Asp	Tyr	Asp	Phe	Asp	Asp	Pro	Phe	Phe	Ala	Asp	Ile	Lys	Ser	Tyr	Sei
225					230					235					240
Gly	Ser	Ser	Ser	Ser	Val	Gly	Val	Ile	Gln	Asp	Ile	Leu	Glu	Ala	Sei
				245					250					255	
Thr	Ser	Lys	Glu	Phe	Gln	Gly	Pro	Gly	Ala	Val	Asn	Ile	Met	Gly	Thi
			260					265					270		
Phe	Leu	Glu	Arg	Asn	Asp	Leu	Gln	Val	Ser	Pro	Ile	Val	Ile	Ser	Tr
		275					280					285			
Leu	Leu	Asp	Leu	Pro	Asn	Gln	Tyr	Pro	Ala	Asn	Ile	Ile	Thr	Asn	Phe
	290					295					300				
Val	Glv	Phe	Leu	Lvs	Gln	Asn	Ile	Val	Ala	Ile	Asn	Arg	Glu	Leu	Ιlϵ

Lys Tyr Met Ser Ile Ser Arg Gly Ile Lys Met Phe Lys Tyr Val Cys Lys Thr Ile Ala Cys Asp Tyr His Asp Pro Asp Tyr Tyr Asn Ile Gln Tyr Val Asn Gly Ser Phe Thr Met Cys Cys Glu Pro Pro Leu Glu Leu Lys Gln Leu Leu Glu Pro Val Ile Asp Lys Met Ala Phe Asn Arg Leu Leu Ser Ser Lys Cys Tyr Cys Phe Ala Asp Asn Arg Cys Ser Leu Gln Leu Pro Trp Ala Val Arg Glu Cys Val Lys Lys Cys Leu Ala Thr Lys Asp Lys Lys Glu Ala Trp Met Leu Gly Leu Leu Gln Pro Val Lys Glu Leu Pro Glu Gln Phe Phe Ser Lys Met Trp Gln Glu Phe Ser Ile Ala Phe Thr Lys Leu Ser Glu Trp Leu Pro Lys Ser Gly Gln Met Ile Trp Asp Phe Val Leu Ser Ala Asn Gly Ile Leu Ser Val Leu Ser Ala Val Leu Ile Gly Thr Ala Ile Ala Arg Asn Cys Lys Ser Met His Asn Glu Asp Lys Ile Val Glu Gly Ile Asn Asn Val Asn Arg Arg Val Phe Glu Ser Asn Ala Tyr Asn Leu Val Pro Ala Thr Val Lys Ser Val Lys Pro Ala Ser Val Lys Phe Gln Ser Leu Ser Gln Gln Thr Val Val Cys Asp

Lys	Leu	Leu	Glu	Asp	Asn	Ile	Val	Thr	Met	Leu	Leu	Ser	Ser	Glu	Asn
545					550					555					560
Glu	Asn	Gly	His	Val	Cys	Thr	Lys	Ser	Tyr	Gln	Cys	Leu	Met	Leu	Arg
				565					570					575	
Asn	Lys	Thr	Met	Cys	Ile	Gln	Arg	His	Tyr	Tyr	Asp	Glu	Trp	Ile	Arg
			580					585					590		
Met	Pro	Phe	Asn	Thr	Lys	Phe	Tyr	Leu	Gln	Cys	Lys	Lys	Thr	Val	Ser
		595					600					605			
Ala	Ala	Tyr	Pro	Tyr	Gly	Tyr	Gln	Ile	Leu	Leu	Lys	Asn	Leu	Lys	Val
	610					615					620				
Ile	Trp	Gly	Ser	Gly	Val	Asp	Val	Asp	Gly	Ser	Tyr	Thr	Ser	Asn	Val
625					630					635					640
Gly	Leu	Val	Glu	Leu	Pro	Met	Ser	Val	Pro	Ser	Phe	Lys	Asp	Leu	Thr
				645					650					655	
Lys	Phe	Ile	Ala	Lys	Glu	Val	Asp	His	Glu	Tyr	Val	Asn	Ser	Gln	Glu
			660					665					670		
Cys	Trp	Ile	Phe	Asp	Ser	Ile	Glu	Arg	Lys	Arg	Cys	Lys	Val	Pro	Πe
		675					680					685			
Thr	Val	Asp	Tyr	Lys	His	Thr	Thr	Ser	Asp	Asp	Ser	Gly	Thr	Val	Arg
	690					695					700				
Leu	Lys	Gln	Ala	Tyr	Lys	Tyr	Pro	Tyr	Ser	Lys	Val	Gly	Met	Cys	Cys
705					710					715					720
Ser	Val	Leu	Leu	Cys	Ala	Ser	Leu	Glu	Arg	Pro	Ile	Ile	Gly	Leu	His
				725					730					735	
Phe	Ser	Gly	Ser	Ala	Arg	Phe	Gly	Tyr	Ser	Glu	Tyr	Leu	Thr	Tyr	Glı
			740					745					750		
Ser	Phe	Asn	Glu	Asn	Ile	Pro	Thr	Arg	Val	Asp	Lys	Glu	Tyr	Val	Phe
		755					760					765			
Glu	Ser	Phe	Ser	His	Lys	Leu	Glu	Asp	Val	Glu	Leu	Ser	Lys	Leu	Ser

Phe Asp Thr Met Leu Tyr Pro Cys Gly Val Val Pro Ala Glu Leu Arg Gln His Gln Ser Gly Lys Thr Gln Ile Ile Pro Ser Ser Ile His Gly Thr Tyr Pro Val Thr Ser Glu Pro Asn Pro Leu Ser Cys Ser Asp Pro . Arg Leu Pro Lys Gly Cys Ser Pro Leu Lys Leu Gly Ile Glu His Met Gly Arg Pro Val Leu Asp Phe Pro Thr Asp Leu Ile Glu Lys Ala Lys Glu Asp Leu Val Glu Val Val Leu Thr Asn Val His Pro Ile Arg Lys Val Gly Leu Val Ser Glu Gln Asp Ala Val Cys Gly Asn Thr Gln Val Lys Gly Phe Glu Pro Leu Glu Trp Ser Thr Ser Glu Gly Phe Pro Leu Ser Ala Leu Arg Pro Lys Thr Thr Lys Gly Lys Lys Trp Leu Phe Asp Leu Glu Glu Thr Pro Glu Gly Tyr Lys Leu Lys Lys Met His Pro Glu Leu Tyr Arg Thr Leu Lys Leu Glu Tyr Asn Leu Arg Val Arg Gly Ile Arg Val Pro Thr Val Phe Thr Asp Cys Leu Lys Asp Thr Cys Ile Ser Thr Glu Lys Cys Arg Ile Pro Gly Lys Thr Arg Ile Phe Ser Ile Ser Pro Val Gln Tyr Thr Ile Ala Phe Lys Met Tyr Phe Gly Asp Phe Leu

Ala Se	er Tyr	Gln	Asn	Ala	Arg	Leu	Ser	Ala	Glu	His	Ala	Ile	Gly	Ile
10	10			-	1015				•	1020				
Asp Pa	ro Asr	Ser	His	Asp	Trp	Ser	Glu	Leu	Ala	Ser	Phe	Leu	Thr	Gln
1025				1030]	1035]	1040
Lys G	ly Thi	Ser	Ile	Ile	Ala	Gly	Asp	Tyr	Lys	Asn	Phe	Gly	Pro	Gly
			1045				-	1050]	1055	
Leu Me	et Lei	ı Thr	Cys	Val	Lys	Ala	Val	Cys	Asp	Val	Ile	Ile	Ala	Trp
		1060]	1065					1070		
Tyr G	lu Leu	ı His	Asp	Pro	Asp	Val	Glu	Arg	Met	Leu	Ile	Arg	Arg	Val
	1075	5				1080					1085			
Ile Le	eu Sei	Glu	Leu	Leu	His	Ala	Lys	His	Phe	Ala	Leu	Asn	Leu	Ile
109	90			-	1095				•	1100				
Tyr G	lu Val	Ser	Ala	Gly	Ile	Pro	Ser	Gly	Ser	Pro	Ile	Thr	Ala	Pro
1105				1110					1115				-	1120
Leu As	sn Sei	Leu	Val	Asn	Cys	Met	Tyr	Val	Arg	Cys	Ala	Trp	Leu	Asp
			1125				-	1130]	1135	
Ile I	le Lys	s Glu	Pro	Leu	Leu	His	Phe	Arg	Arg	Ala	Cys	Asn	Met	Val
		1140				-	1145					1150		
Thr T	yr Gly	/ Asp	Asp	Ile	Cys	Ile	Cys	Val	Ser	Pro	Leu	Tyr	Ile	Asp
	1155	5				1160					1165			
Lys Pl	ne Asr	1 Thr	Leu	Thr	Leu	His	Asn	Phe	Phe	Ala	Lys	Tyr	Asn	Ile
11'	70				1175					1180				
Val Pl	ne Thi	Asp	Gln	Asp	Lys	Ser	Asp	Asn	Ile	Ile	Pro	Phe	Arg	Thr
1185				1190				-	1195					1200
Leu As	sp Thi	· Val	Thr	Phe	Leu	Lys	Arg	Gly	Phe	Arg	Pro	His	Pro	Thr
			1205					1210					1215	
Leu P	ro Sei	Glu	Met	Leu	Ala	Pro	Ile	Asp	Ile	Glu	Ser	Ile	Tyr	Lys
		1220				-	1225					1230		
Cve T	hr Ası	Trn	۵ ا	Ive	Aen	Ive	Glv	Aen	Pro	Thr	Glu	Asn	Thr	Leu

1235 1240 1245 Gln Asn Cys Val Gln Ala Val Glu Leu Ala Phe Gly His Gly Lys Tyr 1260 1250 1255 Val Tyr Thr Glu Ile Arg Asn Asn Leu Leu Asn Val Cys Arg Glu Thr $1275 \cdot$ 1280 1270 1265 Val Gly Lys Thr Phe Glu Ser Tyr Thr Trp Asp Asp Met Ser Asp Arg 1290 1295 1285 Cys Tyr Arg Thr 1300

<210> 3747

<211> 456

<212> PRT

<213> Homo sapiens

<400> 3747

Met Thr Thr Asp Glu Gly Thr Ser Asn Asn Glu Glu Asn Pro Ala Ala

1 5 10 15

Thr Val Val Glu Gln Gly Glu Asp Ile Thr Thr Lys Lys Asp Arg Gly
20 25 30

Val Leu Lys Ile Val Lys Arg Val Gly Thr Ser Glu Glu Thr Pro Met
35 40 45

Ile Gly Asp Lys Val Tyr Val His Tyr Lys Gly Lys Leu Ser Asn Gly
50 55 60

Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Glu Pro Phe Val Phe Ser 65 70 75 80

Leu Gly Lys Gly Gln Val Ile Lys Ala Trp Asp Ile Gly Val Ser Thr

85 90 95

Met	Lys	Lys	Gly	Glu	Ile	Cys	His	Leu	Leu	Cys	Lys	Pro	Glu	Tyr	Ala
			100					105					110		
Tyr	Gly	Ser	Ala	Gly	Ser	Leu	Pro	Lys	Ile	Pro	Ser	Asn	Ala	Thr	Leu
		115					120					125			
Phe	Phe	Glu	Ile	Glu	Leu	Leu	Asp	Phe	Lys	Gly	Glu	Asp	Leu	Phe	Glu
	130					135					140				
Asp	Ser	Gly	Ile	Ile	Arg	Arg	Ile	Lys	Arg	Lys	Gly	Glu	Gly	Tyr	Ser
145					150					155					160
Asn	Pro	Asn	Glu	Gly	Ala	Thr	Val	Glu	Val	His	Leu	Glu	Gly	Cys	Cys
				165					170					175	
Ala	Gly	Arg	Val	Phe	Asp	Cys	Arg	Asp	Val	Val	Phe	Val	Ile	Gly	Glu
			180					185					190		
Gly	Glu	Asp	His	Asp	Ile	Pro	Ile	Gly	Ile	Asp	Lys	Ala	Leu	Glu	Lys
		195					200					205			
Met	Gln	Arg	Glu	Glu	Gln	Cys	Ile	Leu	Tyr	Leu	Gly	Pro	Gln	Tyr	Gly
	210					215					220				
Phe	Gly	Glu	Ala	Gly	Lys	Pro	Lys	Phe	Gly	Ile	Glu	Pro	Asn	Ala	Glu
225					230					235					240
Leu	Met	Tyr	Glu	Val	Thr	Leu	Lys	Ser	Phe	Glu	Lys	Ala	Lys	Glu	Ser
				245					250					255	
Trp	Glu	Met	Asp	Thr	Lys	Glu	Lys	Leu	Glu	Gln	Ala	Ala	Ile	Val	Lys
			260					265					270		
Glu	Lys	Gly	Thr	Val	Tyr	Phe	Lys	Gly	Gly	Lys	Tyr	Met	Gln	Ala	Val
		275					280					285			
Ile	Gln	Tyr	Gly	Lys	Ile	Val	Ser	Trp	Leu	Glu	Met	Glu	Tyr	Gly	Leu
	290					295					300				
Ser	Glu	Lys	Glu	Ser	Lys	Ala	Ser	Glu	Ser	Phe	Leu	Leu	Ala	Ala	Phe
305					310					315					320
Leu	Asn	Leu	Ala	Met	Cvs	Tvr	Leu	Lys	Leu	Arg	Glu	Tyr	Thr	Lys	Ala

Val Glu Cys Cys Asp Lys Ala Leu Gly Leu Asp Ser Ala Asn Glu Lys Gly Leu Tyr Arg Arg Gly Glu Ala Gln Leu Leu Met Asn Glu Phe Glu Ser Ala Lys Gly Asp Phe Glu Lys Val Leu Glu Val Asn Pro Gln Asn Lys Ala Ala Arg Leu Gln Ile Ser Val Cys Gln Arg Lys Ala Lys Glu His Asn Glu Arg Asp Arg Arg Val Tyr Ala Asn Met Phe Lys Lys Phe Ala Glu Gln Asp Ala Lys Glu Glu Ala Ser Lys Ala Leu Ser Lys Lys Ala Val Glu Gly Ala Ala Gly Lys Lys His Glu Ser Gln Thr Met Gly Glu Gly Lys Ala Glu Gly His Val

<210> 3748

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3748

Met Gly Glu Asp Arg Gln Ala Ser Leu Gly Ala Phe Leu Gly Cys Glu

1 5 10 15

Glu Asp Gly Arg Glu Phe Gln Ala Lys Val Trp Ser Asp Cys Ala Arg
20 25 30

His Asp Val Trp Ala His Arg Gln Leu Pro Thr Gly Gly Ala Val Ala 35 40 45 Leu Ser Val Val Met Gly Leu Glu Ala Glu Asn Trp Ala Gly Leu Lys 55 60 50 Ala Arg Leu Gly Leu Phe Gly Val Pro His Arg Ala Val Arg Glu Glu 70 75 80 65 Gly Leu Cys Val Gly Trp Glu Glu Gln Cys Leu Cys Phe Leu Pro Gly 95 85 90 Ser Thr Val Asn Asp Thr Trp Gly Leu Glu Gln Ala Ser Phe Pro Ala 100 105 110 Leu Ser Leu Pro Ile Leu Phe Val Arg Trp Met Pro Trp Phe Ser Val 115 120 125 Pro Leu Leu Gly Lys Asn Thr Tyr Ser Ala Leu Pro Leu Gln Phe Arg 130 135 140 Ser Gly Glu Pro Ile Gln Val Gln Arg Ala Ser Leu Gly 145 150 155 <210> 3749

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3749

Met Gln Leu Pro Lys Gly Asn Arg Cys Lys Tyr Glu Pro Ile His Ile

1 5 10 15

Tyr Phe Phe Pro Ser Phe Phe Phe Leu Arg Trp Ser Leu Ala Leu Ser 20 25 30

Pro Arg Leu Glu Cys Ser Gly Val Asp Leu Ser Ser Leu Gln Pro Pro

40 45 35 Pro Pro Lys Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp 50 55 60 Asp Cys Arg Arg Ala Pro Pro Cys Pro Ala Asn Phe Cys Ile Phe Ser 70 75 65 Arg Asn Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Leu Asp 90 95 85 Leu Val Ile Gln Pro Pro Leu Pro Pro Thr Val Leu Gly Leu

105

110

<210> 3750

<211> 185

<212> PRT

<213> Homo sapiens

100

<400> 3750

Met Phe Gly Gly Leu Ser Gly Ala Thr Val Ile Asp Ser Leu Asp Thr

1 5 10 15

Leu Tyr Leu Met Glu Leu Lys Glu Glu Phe Gln Glu Ala Lys Ala Trp
20 25 30

Val Gly Glu Ser Phe His Leu Asn Val Ser Gly Glu Ala Ser Leu Phe
35 40 45

Glu Val Asn Ile Arg Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu 50 55 60

Thr Gly Glu Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys
65 70 75 80

Leu Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val
85 90 95

Ser Phe Lys Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile Leu Ala Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu Leu Ser Gly Asn Gln Val Phe Ala Glu Lys Ala Ser Leu Leu Pro Thr Leu Leu Pro Ala Glu Gln Arg Asp Glu Arg Ala Ala Thr Gly Phe Ser Glu Ala Ser Gly Ser Ser Leu Met Asp Gln Gln Glu Gly Ser Gly Glu Pro Gly Ser Pro Ser Tyr His

<210> 3751

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3751

Met Pro Leu Arg Leu Asp Ile Lys Arg Lys Leu Thr Ala Arg Ser Asp Arg Val Lys Ser Val Asp Leu His Pro Thr Glu Pro Trp Met Leu Ala Ser Leu Tyr Asn Gly Ser Val Cys Val Trp Asn His Glu Thr Gln Val Gly Ile Phe Gln Asp Phe Ile Arg Asn Lys Ile Leu Cys Glu Thr Val Phe Ile Met Lys Glu Lys Lys Tyr Tyr Asn Arg Ile Gln Asn Leu Tyr 65 70 75 80

Ala Asn Cys Phe Leu Lys Leu Val Gln Ser Ile Leu Asn Met Lys Glu

85 90 95

Leu Thr Phe Met Arg Gly

100

<210> 3752

<211> 1407

<212> PRT

<213> Homo sapiens

<400> 3752

Met Glu Ala Glu Phe Tyr Met Val IIe Leu Thr Cys Leu IIe Phe Arg

1 5 10 15

Asn Ser Glu Gly Phe Gln Ile Val His Val Gln Lys Gln Gln Cys Leu 20 25 30

Phe Lys Asn Glu Lys Val Val Val Gly Ser Cys Asn Arg Thr Ile Gln
35 40 45

Asn Gln Gln Trp Met Trp Thr Glu Asp Glu Lys Leu Leu His Val Lys
50 55 60

Ser Ala Leu Cys Leu Ala Phe Ile Arg Asn Ala Ala Glu Asn Tyr Ser
65 70 75 80

Gln Asn Ser Ser Glu Arg Gln His Pro Asn Leu His Met Thr Gly Ile 85 90 95

Thr Asp Thr Ser Trp Val Leu Ser Thr Thr Gln Pro Phe Ser Ser Thr
100 105 110

Thr Glu Glu Thr Gly Leu Ala Glu Pro Glu Arg Cys Asn Phe Thr Leu 115 · 120 125

Ala	Glu	Ser	Lys	Ala	Ser	Ser	His	Ser	Val	Ser	Ile	Gln	Trp	Arg	Ile
	130					135					140				
Leu	Gly	Ser	Pro	Cys	Asn	Phe	Ser	Leu	Ile	Tyr	Ser	Ser	Asp	Thr	Leu
145					150					155					160
Gly	Ala	Ala	Leu	Cys	Pro	Thr	Phe	Arg	İle	Asp	Asn	Thr	Thr	Tyr	Gly
				165					170					175	
Cys	Asn	Leu	Gln	Asp	Leu	Gln	Ala	Gly	Thr	Ile	Tyr	Asn	Phe	Arg	Ile
			180					185					190		
Ile	Ser	Leu	Asp	Glu	Glu	Arg	Thr	Val	Val	Leu	Gln	Thr	Asp	Pro	Leu
		195					200			•		205			
Pro	Pro	Ala	Arg	Phe	Gly	Val	Ser	Lys	Glu	Lys	Thr	Thr	Ser	Thr	Ser
	210					215					220				
Leu	His	Val	Trp	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Val	Thr	Ser	Tyr	Glu
225					230					235					240
Val	Gln	Leu	Phe	Asp	Glu	Asn	Asn	Gln	Lys	Ile	Gln	Gly	Val	Gln	Ile
				245					250					255	
Gln	Glu	Ser	Thr	Ser	Trp	Asn	Glu	Tyr	Thr	Phe	Phe	Asn	Leu	Thr	Ala
			260					265					270		
Gly	Ser	Lys	Tyr	Asn	Ile	Ala	Ile	Thr	Ala	Val	Ser	Gly	Gly	Lys	Arg
		275					280					285			
Ser	Phe	Ser	Val	Tyr	Thr	Asn	Gly	Ser	Thr	Val	Pro	Ser	Pro	Val	Lys
	290		٠			295					300				
Asp	Ile	Gly	Ile	Ser	Thr	Lys	Ala	Asn	Ser	Leu	Leu	Ile	Ser	Trp	Ser
305					310					315					320
His	Gly	Ser	Gly	Asn	Val	Glu	Arg	Tyr	Arg	Leu	Met	Leu	Met	Asp	Lys
				325					330					335	
Gly	Ile	Leu	Val	His	Gly	Gly	Val	Val	Asp	Lys	His	Ala	Thr	Ser	Tyr
			340					345					350		
Ala	Phe	His	Glv	Len	Thr	Pro	Glv	Tvr	Leu	Tvr	Asn	Leu	Thr	Val	Met

355		36	60	365	
Thr Glu Ala	Ala Gly L	Leu Gln As	sn Tyr Arg	Trp Lys Leu	Val Arg Thr
370		375		380	
Ala Pro Met	Glu Val S	Ser Asn Le	eu Lys Val 1	Thr Asn Asp	Gly Ser Leu
385	3	390	•	395	400
Thr Ser Leu	Lys Val I	Lys Trp Gl	n Arg Pro l	Pro Gly Asn	Val Asp Ser
	405		410		415
Tyr Asn Ile	Thr Leu S	Ser His Ly	s Gly Thr	Ile Lys Glu	Ser Arg Val
	420		425		430
Leu Ala Pro	Trp Ile 7	Thr Glu Th	nr His Phe l	Lys Glu Leu	Val Pro Gly
435		44	10	445	
Arg Leu Tyr	Gln Val 7	Thr Val Se	er Cys Val S	Ser Gly Glu	Leu Ser Ala
450		455		460	
Gln Lys Met	Ala Val (Gly Arg Th	nr Phe Pro	Asp Lys Val	Ala Asn Leu
465	4	170	4	475	480
Glu Ala Asn	Asn Asn (Gly Arg Me	et Arg Ser 1	Leu Val Val	Ser Trp Ser
	485		490		495
Pro Pro Ala	Gly Asp 7	Trp Glu Gl	ln Tyr Arg	Ile Leu Leu	Phe Asn Asp
	500		505		510
Ser Val Val	Leu Leu A	Asn Ile Th	nr Val Gly 1	Lys Glu Glu	Thr Gln Tyr
515		52	20	525	
Val Met Asp	Asp Thr (Gly Leu Va	al Pro Gly	Arg Gln Tyr	Glu Val Glu
530		535		540	
Val Ile Val	Glu Ser (Gly Asn Le	eu Lys Asn S	Ser Glu Arg	Cys Gln Gly
545	Ę	550	!	555	560
Arg Thr Val	Pro Leu A	Ala Val Le	eu Gln Leu	Arg Val Lys	His Ala Asn
	565		570		575
Glu Thr Ser	Leu Ser 1	Ile Met Tr	rp Gln Thr	Pro Val Ala	Glu Trp Glu
	580		585		590

Lys	Tyr	Ile	Ile	Ser	Leu	Ala	Asp	Arg	Asp	Leu	Leu	Leu	Ile	His	Lys
		595					600					605			
Ser	Leu	Ser	Lys	Asp	Ala	Lys	Glu	Phe	Thr	Phe	Thr	Asp	Leu	Val	Pro
	610					615					620				
Gly	Arg	Lys	Tyr	Met	Ala	Thr	Val	Thr	Ser	Ile	Ser	Gly	Asp	Leu	Lys
625					630					635					640
Asn	Ser	Ser	Ser	Val	Lys	Gly	Arg	Thr	Val	Pro	Ala	Gln	Val	Thr	Asp
				645					650					655	
Leu	His	Val	Ala	Asn	Gln	Gly	Met	Thr	Ser	Ser	Leu	Phe	Thr	Asn	Trp
			660					665					670		
Thr	Gln	Ala	Gln	Gly	Asp	Val	Glu	Phe	Tyr	Gln	Val	Leu	Leu	Ile	His
		675					680					685			
Glu	Asn	Val	Val	Ile	Lys	Asn	Glu	Ser	Ile	Ser	Ser	Glu	Thr	Ser	Arg
	690					695					700				
Tyr	Ser	Phe	His	Ser	Leu	Lys	Ser	Gly	Ser	Leu	Tyr	Ser	Val	Val	Val
705					710					715					720
Thr	Thr	Val	Ser	Gly	Gly	Ile	Ser	Ser	Arg	Gln	Val	Val	Val	Glu	Gly
				725					730					735	
Arg	Thr	Val	Pro	Ser	Ser	Val	Ser	Gly	Val	Thr	Val	Asn	Asn	Ser	Gly
			740					745	•				750		
Arg	Asn	Asp	Tyr	Leu	Ser	Val	Ser	Trp	Leu	Leu	Ala	Pro	Gly	Asp	Val
		755					760					765			
Asp	Asn	Tyr	Glu	Val	Thr	Leu	Ser	His	Asp	Gly	Lys	Val	Val	Gln	Ser
	770					775					780				
Leu	Val	Ile	Ala	Lys	Ser	Val	Arg	Glu	Cys	Ser	Phe	Ser	Ser	Leu	Thr
785					790					795					800
Pro	Gly	Arg	Leu	Tyr	Thr	Val	Thr	Ile	Thr	Thr	Arg	Ser	Gly	Lys	Tyr
				805					810					815	
Glu	Asn	His	Ser	Phe	Ser	Gln	Glu	Arg	Thr	Val	Pro	Asp	Lys	Val	Gln

			820					825					830		
Gly	Val	Ser	Val	Ser	Asn	Ser	Ala	Arg	Ser	Asp	Tyr	Leu	Arg	Val	Ser
		835					840					845			
Trp	Val	His	Ala	Thr	Gly	Asp	Phe	Asp	His	Tyr	Glu	Val	Thr	Ile	Lys
	850					855					860				
Asn	Lys	Asn	Asn	Phe	Ile	Gln	Thr	Lys	Ser	Ile	Pro	Lys	Ser	Glu	Asn
865					870					875					880
Glu	Cys	Val	Phe	Val	Gln	Leu	Val	Pro	Gly	Arg	Leu	Tyr	Ser	Val	Thr
				885					890					895	
Val	Thr	Thr	Lys	Ser	Gly	Gln	Tyr	Glu	Ala	Asn	Glu	Gln	Gly	Asn	Gly
			900					905					910		
Arg	Thr	Ile	Pro	Glu	Pro	Val	Lys	Asp	Leu	Thr	Leu	Arg	Asn	Arg	Ser
		915					920					925			
Thr	Glu	Asp	Leu	His	Val	Thr	Trp	Ser	Gly	Ala	Asn	Gly	Asp	Val	Asp
	930					935					940				
Gln	Tyr	Glu	Ile	Gln	Leu	Leu	Phe	Asn	Asp	Met	Lys	Val	Phe	Pro	Pro
945					950					955					960
Phe	His	Leu	Val	Asn	Thr	Ala	Thr	Glu	Tyr	Arg	Phe	Thr	Ser	Leu	Thr
				965					970					975	
Pro	Gly	Arg	Gln	Tyr	Lys	Ile	Leu	Val	Leu	Thr	Ile	Ser	Gly	Asp	Val
			980					985					990		
Gln	Gln	Ser	Ala	Phe	Ile	Glu	Gly	Phe	Thr	Val	Pro	Ser	Ala	Val	Lys
		995				-	1000					1005			
Asn	Ile	His	Ile	Ser	Pro	Asn	Gly	Ala	Thr	Asp	Ser	Leu	Thr	Val	Asn
-	1010					1015				-	1020				
Trp	Thr	Pro	Gly	Gly	Gly	Asp	Val	Asp	Ser	Tyr	Thr	Val	Ser	Ala	Phe
1025					1030					1035		_			1040
Arg	His	Ser	Gln		Val	Asp	Ser			Ile	Pro	Lys			Phe
				1045					1050					1055	

Glu Hi	s Thr	Phe	His	Arg	Leu	Glu	Ala	Gly	Glu	Gln	Tyr	Gln	Ile	Met
		1060					1065]	1070		
Ile Al	a Ser	Val	Ser	Gly	Ser	Leu	Lys	Asn	Gln	Ile	Asn	Val	Val	Gly
	1075					1080				-	1085			
Arg Th	nr Val	Pro	Ala	Ser	Val	Gln	Gly	Val	Ile	Ala	Asp	Asn	Ala	Tyr
109	90				1095]	100				
Ser Se	er Tyr	Ser	Leu	Ile	Val	Ser	Trp	Gln	Lys	Ala	Ala	Gly	Val	Ala
1105				1110					1115]	1120
Glu Aı	g Tyr	Asp	Ile	Leu	Leu	Leu	Thr	Glu	Asn	Gly	Ile	Leu	Leu	Arg
			1125				-	1130					1135	
Asn Th	nr Ser	Glu	Pro	Ala	Thr	Thr	Lys	Gln	His	Lys	Phe	Glu	Asp	Leu
		1140					1145				-	1150		
Thr Pa	co Gly	Lys	Lys	Tyr	Lys	Ile	Gln	Ile	Leu	Thr	Val	Ser	Gly	Gly
	1155					1160					1165			
Leu Pl	ne Ser	Lys	Glu	Ala	Gln	Thr	Glu	Gly	Arg	Thr	Val	Pro	Ala	Ala
117	70			-	1175					1180				
Val Th	nr Asp	Leu	Arg	Ile	Thr	Glu	Asn	Ser	Thr	Arg	His	Leu	Ser	Phe
1185				1190					1195				-	1200
Arg T	rp Thr	Ala	Ser	Glu	Gly	Glu	Leu	Ser	Trp	Tyr	Asn	Ile	Phe	Leu
			1205					1210					1215	
Tyr As	sn Pro	Asp	Gly	Asn	Leu	Gln	Glu	Arg	Ala	Gln	Val	Asp	Pro	Leu
		1220					1225					1230		
Val G	ln Ser	Phe	Ser	Phe	Gln	Asn	Leu	Leu	Gln	Gly	Arg	Met	Tyr	Lys
	1235					1240					1245			
Met Va	al Ile	Val	Thr	His	Ser	Gly	Glu	Leu	Ser	Asn	Glu	Ser	Phe	Ile
129	50				1255					1260				
Phe G	ly Arg	Thr	Val	Pro	Ala	Ser	Val	Ser	His	Leu	Arg	Gly	Ser	Asn
1265				1270					1275					1280
Arg As	sn Thr	Thr	Asp	Ser	Leu	Trp	Phe	Asn	Trp	Ser	Pro	Ala	Ser	Gly

1290 1295 1285 Asp Phe Asp Phe Tyr Glu Leu Ile Leu Tyr Asn Pro Asn Gly Thr Lys 1300 1305 Lys Glu Asn Trp Lys Asp Lys Asp Leu Thr Glu Trp Arg Phe Gln Gly 1320 1315 1325 Leu Val Pro Gly Arg Lys Tyr Val Leu Trp Val Val Thr His Ser Gly 1340 1330 1335 Asp Leu Ser Asn Lys Val Thr Ala Glu Ser Arg Thr Ala Pro Ser Pro 1345 1350 1355 1360 Pro Ser Leu Met Ser Phe Ala Asp Ile Ala Asn Thr Ser Leu Ala Ile 1375 1365 1370 Thr Trp Lys Gly Pro Pro Asp Trp Thr Asp Tyr Asn Asp Phe Glu Leu 1380 1390 1385 Gln Trp Leu Pro Arg Asp Ala Leu Thr Val Phe Asn Pro Tyr Asn 1395 1400 1405

<210> 3753

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3753

1 5 10 15

Arg Pro Gly Thr Ser Gln Pro Ile Thr Leu Gln Ser Arg Pro Pro Asp
20 25 30

Tyr Glu Ser Arg Thr Ser Gly Thr Arg Arg Ala Pro Ser Pro Val Val

Met Ser Thr Ile Ser Gly Thr Arg Ser Thr Thr Val Thr Phe Thr Val

35 40 45

Ser Pro Thr Glu Met Asn Lys Glu Thr Leu Pro Ala Pro Leu Ser Ala Ala Thr Ala Ser Pro Ser Pro Ala Leu Ser Asp Val Phe Ser Leu Pro Ser Gln Pro Pro Ser Gly Asp Leu Phe Gly Leu Asn Pro Ala Gly Arg Ser Arg Ser Pro Ser Pro Ser Ile Leu Gln Gln Pro Ile Ser Asn Lys Pro Phe Thr Thr Lys Pro Val His Leu Trp Thr Lys Pro Asp Val Ala Asp Trp Leu Glu Ser Leu Asn Leu Gly Glu His Lys Glu Ala Phe Met Asp Asn Glu Ile Asp Gly Ser His Leu Pro Asn Leu Gln Lys Glu Asp Leu Ile Asp Leu Gly Val Thr Arg Val Gly His Arg Met Asn Ile Glu Arg Ala Leu Lys Gln Leu Leu Asp Arg

<210> 3754

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3754

Met Asp Gln Val Ser Phe Pro Ala Val His Glu Gly Thr Asp Ile Arg

1 5 10 15

Ser Ser Cys Pro Asn Ser Gly Pro Arg Leu Thr Gln Lys Ser Asn Ser

Gln Asp Trp Lys Asp Phe Gln Ser Asn Asn Lys Gly Leu Lys Asp Asp Cys Pro Arg Lys Ile Leu Gln Arg Arg Trp Ser Tyr His Leu Arg Ser Lys Cys Ser Ile Ala His Phe Ile Ile Ser Tyr Phe Val Ile Thr Thr Gln Trp Val Ser Trp Leu Pro Ala Asn His Ile Lys Ser Asp Asn Leu Gly Phe Thr Ser Leu Thr Asn Val Ser Lys Ala Ser Thr Ser Asp Ile Ala Ile

<210> 3755

<211> 492

<212> PRT

<213> Homo sapiens

<400> 3755

Met Glu Leu Gly Leu Ser Trp Ile Phe Leu Leu Ala Ile Leu Lys Gly

Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln

Pro Gly Arg Pro Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe

Asp Tyr Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu

Glu	Trp	Val	Ser	Gly	Ile	Thr	Trp	Asn	Ser	Gly	Asp	Met	Gly	Tyr	Ala
65					70					75					80
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Ile	Ala	Lys	Asn
				85					90					95	
Ser	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Leu
			100					105					110		
Tyr	Tyr	Cys	Ala	Lys	Asp	Gln	Gln	Gln	Leu	Phe	Asp	Ser	Phe	Asp	Ile
		115					120					125			
Trp	Gly	Gln	Gly	Thr	Met	Val	Thr	Val	Ser	Ser	Ala	Ser	Pro	Thr	Ser
	130					135					140				
Pro	Lys	Val	Phe	Pro	Leu	Ser	Leu	Cys	Ser	Thr	Gln	Pro	Asp	Gly	Asn
145					150					155					160
Val	Val	Ile	Ala	Cys	Leu	Val	Gln	Gly	Phe	Phe	Pro	Gln	Glu	Pro	Leu
				165					170					175	
Ser	Val	Thr	Trp	Ser	Glu	Ser	Gly	Gln	Gly	Val	Thr	Ala	Arg	Asn	Phe
			180					185					190		
Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly	Asp	Leu	Tyr	Thr	Thr	Ser	Ser	Gln
		195					200					205			
Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys	Leu	Ala	Gly	Lys	Ser	Val	Thr	Cys
	210					215					220				
His	Val	Lys	His	Tyr	Thr	Asn	Pro	Ser	Gln	Asp	Val	Thr	Val	Pro	Cys
225					230					235					240
Pro	Val	Pro	Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser	Thr	Pro	Pro	Thr
				245					250					255	
Pro	Ser	Pro	Ser	Cys	Cys	His	Pro	Arg	Leu	Ser	Leu	His	Arg	Pro	Ala
			260					265					270		
Leu	Glu	Asp	Leu	Leu	Leu	Gly	Ser	Glu	Ala	Asn	Leu	Thr	Cys	Thr	Leu
		275					280					285			
Thr	Glv	Leu	Arg	Asp	Ala	Ser	Glv	Val	Thr	Phe	Thr	Trp	Thr	Pro	Ser

Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Asp Arg Asp Leu Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys Ala Glu Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr Pro Glu Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr

<210> 3756

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3756

Met Pro Ala Arg Ala Ala Val Ser Ser Glu Gly Leu Thr Ser Glu Glu

1 5 10 15

Ser Val Ser Lys Leu Ile Gln Phe Ile Asn Lys Val Tyr Phe Leu Met

20 25 30

Val Leu Thr Glu Gly Pro Ser Phe Val Leu Ala Val Gly Arg Val Tyr

35 40 45

Phe His Ile Leu Arg Pro Pro Ala Ala Phe His Pro Tyr Pro Ser Ser

50 55 60

Met Trp Pro Leu Thr Leu Cys Asn Gln Gln Gly Glu Pro Leu Phe Ser

65 70 75 80

Glu Arg Pro Ser Leu Pro Phe Arg Val Phe His Leu Ile Lys Ser Gly

85 90 95

Ser Ser Lys Met Ile Gln Leu Leu Ile Asn Leu Lys Leu Thr Tyr Leu

100 105 110

<210> 3757

<211> 337

<212> PRT

<213> Homo sapiens

<400> 3757

Met Lys His Leu Trp Phe Phe Leu Leu Val Val Ala Ala Pro Arg Trp

1 5 10 15

Val Leu Ser Gln Leu Gln Leu Gln Glu Ser Gly Ser Ser Leu Val Lys

			20					25					30		
Pro	Ser	Gln	Thr	Leu	Ser	Leu	Thr	Cys	Ala	Val	Ser	Gly	Gly	Ser	Ile
		35					40					45			
Ser	Gly	Asn	Asp	His	Ser	Trp	Asn	Trp	Ile	Arg	Gln	Pro	Phe	Gly	Lys
	50					55					60				
Gly	Leu	Glu	Trp	Ile	Gly	Tyr	Met	Phe	Gln	Ser	Gly	Thr	Thr	Tyr	Tyr
65					70					75					80
Asn	Pro	Ser	Leu	Lys	Ser	Arg	Val	Thr	Ile	Ser	Leu	Asp	Arg	Ser	Arg
				85					90					95	
Asn	Gln	Phe	Ser	Leu	Arg	Leu	Thr	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala
			100					105					110		
Met	Tyr	Tyr	Cys	Ala	Arg	Gly	Tyr	Ser	Asp	Leu	Ala	Ser	Ser	Tyr	Phe
		115					120					125			
His	Met	Asp	Val	Trp	Gly	Lys	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Thr
	130					135					140				
Pro	Thr	Lys	Ala	Pro	Asp	Val	Phe	Pro	Ile	Ile	Ser	Gly	Cys	Arg	His
145					150					155					160
Pro	Lys	Asp	Asn	Ser	Pro	Val	Val	Leu	Ala	Cys	Leu	Ile	Thr	Gly	Tyr
				165					170					175	
His	Pro	Thr	Ser	Val	Thr	Val	Thr	Trp	Tyr	Met	Gly	Thr	Gln	Ser	Gln
			180					185					190		
Pro	Gln	Arg	Thr	Phe	Pro	Glu	Ile	Gln	Arg	Arg	Asp	Ser	Tyr	Tyr	Met
		195					200					205			
Thr	Ser	Ser	Gln	Leu	Ser	Thr	Pro	Leu	Gln	Gln	Trp	Arg	Gln	Gly	Glu
	210					215					220				
Tyr	Lys	Cys	Val	Val	Gln	His	Thr	Ala	Ser	Lys	Ser	Lys	Lys	Glu	Val
225					230					235					240
Phe	Arg	Trp	Pro	Glu	Ser	Pro	Lys	Ala	Gln	Ala	Ser	Ser	Val	Pro	Thr
				245					250					255	

Ala Gln Pro Gln Ala Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro 260 265 270

Ala Thr Thr Arg Asn Thr Gly Arg Gly Glu Glu Lys Lys Glu
275 280 285

Lys Glu Lys Glu Glu Glu Glu Glu Arg Asp Lys Asp Thr Arg Val Ser 290 295 300

Glu Pro His Pro Ala Ser Trp Arg Leu Pro Ala Asn Pro Cys Ser Ala 305 310 315 320

Gly Pro Val Ala Pro Gly Gln Ser His Leu His Leu Leu Arg Gly Gly
325 330 335

Gln

<210> 3758

<211> 851

<212> PRT

<213> Homo sapiens

<400> 3758

Met Lys Met Val Cys Lys Asp Gln Ala Ser Phe Leu Ser Asp Ser Asn
1 5 10 15

Met Phe Ile Asn Leu Pro Arg Val Lys Glu Leu Leu Glu Asp Asp Lys

20 25 30

Glu Lys Phe Asn Ile Pro Glu Asp Ser Thr Pro Phe Cys Leu Lys Leu
35 40 45

Tyr Gln Glu Ile Leu Gln Leu Pro Asn Gly Ala Leu Val Trp Thr Phe
50 55 60

Leu Lys Pro Ile Leu His Gly Lys Ile Leu Tyr Thr Pro Asn Thr Pro

65					70					75					80
Glu	Ile	Asn	Lys	Val	Ile	Gln	Lys	Ala	Asn	Tyr	Thr	Phe	Tyr	Ile	Val
		-		85					90					95	
Asp	Lys	Leu	Lys	Thr	Leu	Ser	Glu	Thr	Leu	Leu	Glu	Met	Thr	Ser	Leu
			100					105					110		
Phe	Gln	Arg	Ser	Gly	Ser	Gly	Gln	Met	Phe	Asn	Gln	Leu	Gln	Glu	Ala
		115					120					125			
Leu	Arg	Asn	Lys	Phe	Val	Arg	Asn	Phe	Val	Glu	Asn	Gln	Leu	His	Ile
	130					135					140				
Asp	Val	Asp	Lys	Leu	Thr	Glu	Lys	Leu	Gln	Thr	Tyr	Gly	Gly	Leu	Leu
145					150					155					160
Asp	Glu	Met	Phe	Asn	His	Ala	Gly	Ala	Gly	Arg	Phe	Arg	Phe	Leu	Gly
				165					170					175	
Ser	Ile	Leu	Val	Asn	Leu	Ser	Ser	Cys	Val	Ala	Leu	Asn	Arg	Phe	Gln
			180					185					190		
Ala	Leu	Gln	Ser	Val	Asp	Ile	Leu	Glu	Thr	Lys	Ala	His	Glu	Leu	Leu
		195					200					205			
Gln	Gln	Asn	Ser	Phe	Leu	Ala	Ser	Ile	Ile	Phe	Ser	Asn	Ser	Leu	Phe
	210					215					220				
Asp	Lys	Asn	Phe	Arg	Ser	Glu	Ser	Val	Lys	Leu	Pro	Pro	His	Val	Ser
225					230					235					240
Tyr	Thr	Ile	Arg	Thr	Asn	Val	Leu	Tyr	Ser	Val	Arg	Thr	Asp	Val	Val
				245					250					255	
Lys	Asn	Pro	Ser	Trp	Lys	Phe	His	Pro	Gln	Asn	Leu	Pro	Ala	Asp	Gly
			260					265					270		
Phe	Lys	Tyr	Asn	Tyr	Val	Phe	Ala	Pro	Leu	Gln	Asp	Met	Ile	Glu	Arg
		275					280					285			
Ala	Ile	Ile	Leu	Val	Gln	Thr	Gly	Gln	Glu	Ala	Leu	Glu	Pro	Ala	Ala
	290					295					300			•	

Gln	Thr	Gln	Ala	Ala	Pro	Tyr	Pro	Cys	His	Thr	Ser	Asp	Leu	Phe	Leu
305					310					315					320
Asn	Asn	Val	Gly	Phe	Phe	Phe	Pro	Leu	Ile	Met	Met	Leu	Thr	Trp	Met
				325					330					335	
Val	Ser	Val	Ala	Ser	Met	Val	Arg	Lys	Leu	Val	Tyr	Glu	Gln	Glu	Ile
			340					345					350		
Gln	Ile	Glu	Glu	Tyr	Met	Arg	Met	Met	Gly	Val	His	Pro	Val	Ile	His
		355					360					365			
Phe	Leu	Ala	Trp	Phe	Leu	Glu	Asn	Met	Ala	Val	Leu	Thr	Ile	Ser	Ser
	370					375					380				
Ala	Thr	Leu	Ala	Ile	Val	Leu	Lys	Thr	Ser	Gly	Ile	Phe	Ala	His	Ser
385					390					395					400
Asn	Thr	Phe	Ile	Val	Phe	Leu	Phe	Leu	Leu	Asp	Phe	Gly	Met	Ser	Val
				405					410					415	
Val	Met	Leu	Ser	Tyr	Leu	Leu	Ser	Ala	Phe	Phe	Ser	Gln	Ala	Asn	Thr
			420					425					430		
Ala	Ala	Leu	Cys	Thr	Ser	Leu	Val	Tyr	Met	lle	Ser	Phe	Leu	Pro	Tyr
		435					440					445			
Ile	Val	Leu	Leu	Val	Leu	His	Asn	Gln	Leu	Ser	Phe	Val	Asn	Gln	Thr
	450					455					460				
Phe	Leu	Cys	Leu	Leu	Ser	Thr	Thr	Ala	Phe	Gly	Gln	Gly	Val	Phe	Phe
465					470					475					480
Ile	Thr	Phe	Leu	Glu	Gly	Gln	Glu	Thr	Gly	Ile	Gln	Trp	Asn	Asn	Met
				485					490					495	
Tyr	Gln	Ala	Leu	Glu	Gln	Gly	Gly	Met	Thr	Phe	Gly	Trp	Val	Cys	Trp
			500					505					510		
Met	Ile	Leu	Phe	Asp	Ser	Ser	Leu	Tyr	Phe	Leu	Cys	Gly	Trp	Tyr	Leu
		515					520					525			
Ser	Asn	Leu	He	Pro	Glv	Thr	Phe	Glv	Leu	Arg	Lvs	Pro	Trp	Tvr	Phe

	530					535					540				
Pro	Phe	Thr	Ala	Ser	Tyr	Trp	Lys	Ser	Val	Gly	Phe	Leu	Val	Glu	Lys
545					550					555					560
Arg	Gln	Tyr	Phe	Leu	Ser	Ser	Ser	Leu	Phe	Phe	Phe	Asn	Glu	Asn	Phe
				565					570					575	
Asp	Asn	Lys	Gly	Ser	Ser	Leu	Gln	Asn	Arg	Glu	Gly	Glu	Leu	Glu	Gly
			580					585					590		
Ser	Ala	Pro	Gly	Val	Thr	Leu	Val	Ser	Val	Thr	Lys	Glu	Tyr	Glu	Gly
		595					600					605			
His	Lys	Ala	Val	Val	Gln	Asp	Leu	Ser	Leu	Thr	Phe	Tyr	Arg	Asp	Gln
	610					615					620				•
Ile	Thr	Ala	Leu	Leu	Gly	Thr	Asn	Gly	Ala	Gly	Lys	Thr	Thr	Ile	Ile
625					630					635					640
Ser	Met	Leu	Thr	Gly	Leu	His	Pro	Pro	Thr	Ser	Gly	Thr	Ile	Ile	Ile
				645					650					655	
Asn	Gly	Lys	Asn	Leu	Gln	Thr	Asp	Leu	Ser	Arg	Val	Arg	Met	Glu	Leu
			660					665					670		
Gly	Val	Cys	Pro	Gln	Gln	Asp	Ile	Leu	Leu	Asp	Asn	Leu	Thr	Val	Arg
		675					680					685			
Glu	His	Leu	Leu	Leu	Phe	Ala	Ser	Ile	Lys	Ala	Pro	Gln	Trp	Thr	Lys
	690					695					700				
Lys	Glu	Leu	His	Gln	Gln	Val	Asn	Gln	Thr	Leu	Gln	Asp	Val	Asp	Leu
705					710					715					720
Thr	Gln	His	Gln	His	Lys	Gln	Thr	Arg	Ala	Leu	Ser	Gly	Gly	Leu	Lys
				725					730					735	
Arg	Lys	Leu	Ser	Leu	Gly	Ile	Ala	Phe	Met	Gly	Met	Ser	Arg	Thr	Val
			740					745					750		
Val	Leu	Asp	Glu	Pro	Thr	Ser	Gly	Val	Asp	Pro	Cys	Ser	Arg	His	Ser
		755					760					765			

Leu Trp Asp Ile Leu Leu Lys Tyr Arg Glu Gly Arg His Trp Ala Ser 770 775 780 Phe Cys Leu Leu Phe Pro Gln Tyr Cys Val Ala Gly Asn Ala Leu Leu 790 795 785 800 Leu Tyr Ser Arg Ile Lys Leu Tyr Pro Ser Glu Ala Thr Leu Ser Phe 805 810 815 Ser Glu Lys Tyr Lys Phe Leu Lys Ala Leu Ile Gly Ile Tyr Ser Leu 825 830 820 Asp Asn Ile Ser Ile Val Leu Arg Ile Ala Tyr Phe Val Phe Asp Leu 835 840 845

Leu Thr Gln 850

<210> 3759

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3759

Met Trp Ala Phe Ser Glu Leu Pro Met Pro Leu Leu Ile Asn Leu Ile

1 5 10 15

Val Ser Leu Leu Gly Phe Val Ala Thr Val Thr Leu Ile Pro Ala Phe
20 25 30

Arg Gly His Phe Ile Ala Ala Arg Leu Cys Gly Gln Asp Leu Asn Lys

35 40 45

Thr Ser Arg Gln Gln Ile Pro Glu Ser Gln Gly Val Ile Ser Gly Ala
50 55 60

Val Phe Leu Ile Ile Leu Phe Cys Phe Ile Pro Phe Pro Phe Leu Asn

65					70					75					80
Cys	Phe	Val	Lys	Glu	Gln	Cys	Lys	Ala	Phe	Pro	His	His	Glu	Phe	Val
				85					90					95	
Ala	Leu	Ile	Gly	Ala	Leu	Leu	Ala	Ile	Cys	Cys	Met	Ile	Phe	Leu	Gly
			100					105					110		
Phe	Ala	Asp	Asp	Val	Leu	Asn	Leu	Arg	Trp	Arg	His	Lys	Leu	Leu	Leu
		115					120					125			
Pro	Thr	Ala	Ala	Ser	Leu	Pro	Leu	Leu	Met	Val	Tyr	Phe	Thr	Asn	Phe
	130					135					140				
Gly	Asn	Thr	Thr	Ile	Val	Val	Pro	Lys	Pro	Phe	Arg	Pro	Ile	Leu	Gly
145					150					155					160
Leu	His	Leu	Asp	Leu	Gly	Ile	Leu	Tyr	Tyr	Val	Tyr	Met	Gly	Leu	Leu
				165					170					175	
Ala	Val	Phe	Cys	Thr	Asn	Ala	Ile	Asn	Ile	Leu	Ala	Gly	Ile	Asn	Gly
			180					185					190		
Leu	Glu	Ala	Gly	Gln	Ser	Leu	Val	Ile	Ser	Ala	Ser	Ile	Ile	Val	Phe
		195					200					205			
Asn	Leu	Val	Glu	Leu	Glu	Gly	Asp	Cys	Arg	Asp	Asp	His	Val	Phe	Ser
	210					215					220				
Leu	Tyr	Phe	Met	Ile	Pro	Phe	Phe	Phe	Thr	Thr	Leu	Gly	Leu	Leu	Tyr
225					230					235					240
His	Asn	Trp	Tyr	Pro	Ser	Arg	Val	Phe	Val	Gly	Asp	Thr	Phe	Cys	Tyr
				245					250					255	
Phe	Ala	Gly	Met	Thr	Phe	Ala	Val	Val	Gly	Ile	Leu	Gly	His	Phe	Ser
			260					265					270		
Lys	Thr	Met	Leu	Leu	Phe	Phe	Met	Pro	Gln	Val	Phe	Asn	Phe	Leu	Tyr
		275					280					285			
Ser	Leu	Pro	Gln	Leu	Leu	His	Ile	Ile	Pro	Cys	Pro	Arg	His	Arg	Ile
	290					295					300				

Pro Arg Leu Asn Ile Lys Thr Gly Lys Leu Glu Met Ser Tyr Ser Lys 305 310 315 320 Phe Arg Thr Lys Ser Leu Ser Phe Leu Gly Thr Phe Ile Leu Lys Val 325 330 335 Ala Glu Ser Leu Gln Leu Val Thr Val His Gln Ser Glu Thr Glu Asp 340 345 350 Gly Glu Phe Thr Glu Cys Asn Asn Met Thr Leu Ile Asn Leu Leu Leu 360 365 355 Lys Val Leu Gly Pro Ile His Glu Arg Asn Leu Thr Leu Leu Leu Leu 380 370 375 Leu Leu Gln Ile Leu Gly Ser Ala Ile Thr Phe Ser Ile Arg Tyr Gln 385 390 395 400 Leu Val Arg Leu Phe Tyr Asp Val

<210> 3760

<211> 211

<212> PRT

<213> Homo sapiens

405

<400> 3760

Met Lys Ser Val Lys Val Ser Glu Asn Phe Ser Cys Asn Ile Thr Leu 1 5 10 15

Met Cys Ser Val Lys Gly Ala Glu Lys Ser Val Leu Tyr Ser Trp Thr 20 25 30

Pro Arg Glu Pro His Ala Ser Glu Ser Asn Gly Gly Ser Ile Leu Thr 35 40 45

Val Ser Arg Thr Pro Cys Asp Pro Asp Leu Pro Tyr Ile Cys Thr Ala

50 55 60

Gln Asn Pro Val Ser Gln Arg Ser Ser Leu Pro Val His Val Gly Gln
65 70 75 80

Phe Cys Thr Asp Pro Gly Ala Ser Arg Gly Gly Thr Thr Gly Glu Thr
85 90 95

Val Val Gly Val Leu Gly Glu Pro Val Thr Leu Pro Leu Ala Leu Pro 100 105 110

Ala Cys Arg Asp Thr Glu Lys Val Val Trp Leu Phe Asn Thr Ser Ile
115 120 125

Ile Ser Lys Glu Arg Glu Glu Ala Ala Thr Ala Asp Pro Leu Ile Lys
130 135 140

Ser Arg Asp Pro Tyr Lys Asn Arg Val Trp Val Ser Ser Gln Asp Cys 145 150 155 160

Ser Leu Lys Ile Ser Gln Leu Lys Ile Glu Asp Ala Gly Pro Tyr His 165 170 175

Ala Tyr Val Cys Ser Glu Ala Ser Ser Val Thr Ser Met Thr His Val 180 185 190

Thr Leu Leu Ile Tyr Arg Glu Ser Leu Gly Arg Ala Pro Ile Thr Arg 195 200 205

Phe Leu Leu

210

<210> 3761

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3761

Met Thr Gly Ala Cys His His Ala Gln Leu Ile Phe Val Phe Leu Val Glu Met Glu Phe Cys His Val Gly Gln Ala Gly Leu Lys Leu Ile Arg Pro Pro Trp Leu Gly Leu Gln Gly Arg Ala Thr Ala Pro Ser Leu Phe Phe Val Phe Leu Val Glu Met Gly Phe Cys His Val Gly Gln Ala Gly Pro Glu His Leu Ala Ser Gly Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Thr Ser His His Ala Trp Leu Gly Pro Ser Phe Cys Leu Glu Ala Leu Gly Cys Ser Pro Leu Thr Ser Ser Leu Lys Ser His Thr Thr Thr Phe Ser Phe Gly Val Ser Leu Ser Pro Met Pro Gly Trp Gly Ile Lys Thr Tyr Gly Ile Phe Ser Thr Ala Pro Cys Phe Ser Phe Leu Ser Arg Asn Arg Pro Thr Ala Ala Leu Leu Glu Asn Ser Glu Asp Ser His Asp Phe Phe Trp Phe Phe Phe Phe Phe Phe

<210> 3762

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3762

Met His Ser Val Ala His Pro His Pro Gly Val Pro Pro Trp Val Pro

1 5 10 15

Ala Thr Leu Ile Ile Thr Gly Lys Arg Arg Gly Ala Ala Ala Gly Gly
20 25 30

Ala Gly Leu Glu His Gly Gly Ser Gly Arg Ala His Leu Arg Glu Val
35 40 45

Ser Ala Glu Thr Trp Arg Thr Arg Gly Val Gly Ala Gly Arg Leu Val
50 55 60

Thr Gly Pro Ala Leu Ala Ser Gly Pro Pro Cys Ser Gln Leu Tyr Asn 65 70 75 80

Gly Gln Gly Ser Pro Arg Thr Ile Ser Trp Gly Leu Gly His Thr Arg 85 90 95

Val Gly Val Ala Ser Leu Leu Met Leu Glu Ser Leu Ser Gly Leu Ala 100 105 110

Leu Trp Phe Ser Pro Pro Pro Ala Ala Ser Arg Pro Pro Gly Pro Gly
115 120 125

Leu Ser Leu Tyr Thr Asp Gly Ser Lys Ala Trp Gly Gly Arg His Arg
130 135 140

Ser Thr Gly Gly Ala His Ala Ser Leu Thr His Ser Gln Val Ser Pro 145 150 155 160

Pro Gly Ser Gly Asn Leu Thr Gln His Gly His Val Cys Pro Cys Val 165 170 175

Thr Met Pro Ala Leu Lys Thr Thr Pro Pro Phe Leu Ser Pro His Arg
180 185 190

Gly Leu Asp Ala Ala Ser Trp Ala Gln Ile His Gln Lys Leu Arg Asp 195 200 205

Phe Ser Arg Ser Thr Gln Val Gly Gly Lys Gly Trp Pro Arg Pro Ile 210 215 220 Leu Thr Pro Cys Pro Ser Ser Trp Leu Thr Ser Pro Cys Gln Ala Glu Leu Glu Arg Glu Arg Ala Gln Leu Leu Val Arg Ala Thr Met Ala Glu Glu Gln Leu Ser Glu Leu Gln Glu Tyr Val Asp Gln His Leu Gly Arg Tyr Lys His Glu Ile Leu Arg Leu Arg Lys Leu Ala Gly Ala Gly Asp Pro Trp Lys Val Gly Ala Val Pro Pro Ala Lys Pro Gln His Pro Arg Thr Gly Ser His

<210> 3763

<211> 823

<212> PRT

<213> Homo sapiens

<400> 3763

Met Thr Leu Leu Ser Ser Gln Ser Ser Ser Leu Val Ala Pro Ser Gly Ser Val Ser Ala Glu Asn Pro Glu Gln Arg Met Leu Glu Lys Arg Ala Lys Val Ile Glu Glu Leu Leu Gln Thr Glu Arg Asp Tyr Ile Arg Asp Leu Glu Met Cys Ile Glu Arg Ile Met Val Pro Met Gln Gln Ala Gln Val Pro Asn Ile Asp Phe Glu Gly Leu Phe Gly Asn Met Gln Met Val

65					70					75					80
Ile	Lys	Val	Ser	Lys	Gln	Leu	Leu	Ala	Ala	Leu	Glu	Ile	Ser	Asp	Ala
				85					90					95	
Val	Gly	Pro	Val	Phe	Leu	Gly	His	Arg	Asp	Glu	Leu	Glu	Gly	Thr	Tyr
			100					105					110		
Lys	Ile	Tyr	Cys	Gln	Asn	His	Asp	Glu	Ala	Ile	Ala	Leu	Leu	Glu	Ile
		115					120					125			
Tyr	Glu	Lys	Asp	Glu	Lys	Ile	Gln	Lys	His	Leu	Gln	Asp	Ser	Leu	Ala
	130					135					140				
Asp	Leu	Lys	Ser	Leu	Tyr	Asn	Glu	Trp	Gly	Cys	Thr	Asn	Tyr	Ile	Asn
145					150					155					160
Leu	Gly	Ser	Phe	Leu	Ile	Lys	Pro	Val	Gln	Arg	Val	Met	Arg	Tyr	Pro
				165					170					175	
Leu	Leu	Leu	Met	Glu	Leu	Leu	Asn	Ser	Thr	Pro	Glu	Ser	His	Pro	Asp
			180					185					190		
Lys	Val	Pro	Leu	Thr	Asn	Ala	Val	Leu	Ala	Val	Lys	Glu	Ile	Asn	Val
		195					200					205			
Asn	Ile	Asn	Glu	Tyr	Lys	Arg	Arg	Lys	Asp	Leu	Val	Leu	Lys	Tyr	Arg
	210					215					220				
Lys	Gly	Asp	Glu	Asp	Ser	Leu	Met	Glu	Lys	Ile	Ser	Lys	Leu	Asn	Ιle
225					230					235					240
His	Ser	Ile	Ile	Lys	Lys	Ser	Asp	Arg	Val	Ser	Ser	His	Leu	Lys	His
				245					250					255	
Leu	Thr	Gly	Phe	Ala	Pro	Gln	Ile	Lys	Asp	Glu	Val	Ile	Glu	Glu	Thr
			260					265					270		
Glu	Lys	Asn	Phe	Arg	Met	Gln	Glu	Arg	Leu	Ile	Lys	Ser	Phe	Ile	Arg
		275					280					285			
Asp	Leu	Ser	Leu	Tyr	Leu	Gln	His	Ile	Arg	Glu	Ser	Ala	Cys	Val	Lys
	290					295					300				

Ī	Val	Val	Ala	Ala	Val	Ser	Met	Trp	Asp	Val	Cys	Met	Glu	Arg	Gly	His
•	305					310					315					320
I	Arg	Asp	Leu	Glu	Gln	Phe	Glu	Arg	Val	His	Arg	Tyr	Ile	Ser	Asp	Gln
					325					330					335	
1	Leu	Phe	Thr	Asn	Phe	Lys	Glu	Arg	Thr	Glu	Arg	Leu	Val	Ile	Ser	Pro
				340					345					350		
I	Leu	Asn	Gln	Leu	Leu	Ser	Met	Phe	Thr	Gly	Pro	His	Lys	Leu	Val	Gln
			355					360					365			
]	Lys	Arg	Phe	Asp	Lys	Leu	Leu	Asp	Phe	Tyr	Asn	Cys	Thr	Glu	Arg	Ala
		370					375					380				
(Glu	Lys	Leu	Lys	Asp	Lys	Lys	Thr	Leu	Glu	Glu	Leu	Gln	Ser	Ala	Arg
;	385					390					395			•		400
1	Asn	Asn	Tyr	Glu	Ala	Leu	Asn	Ala	Gln	Leu	Leu	Asp	Glu	Leu	Pro	Lys
					405					410					415	
]	Phe	His	Gln	Tyr	Ala	Gln	Gly	Leu	Phe	Thr	Asn	Cys	Val	His	Gly	Tyr
				420					425					430		
1	Ala	Glu	Ala	His	Cys	Asp	Phe	Val	His	Gln	Ala	Leu	Glu	Gln	Leu	Lys
			435					440					445			
]	Pro	Leu	Leu	Ser	Leu	Leu	Lys	Val	Ala	Gly	Arg	Glu	Gly	Asn	Leu	Ile
		450					455					460				
4	Ala	Ile	Phe	His	Glu	Glu	His	Ser	Arg	Val	Leu	Gln	Gln	Leu	Gln	Val
4	465					470					475					480
]	Phe	Thr	Phe	Phe	Pro	Glu	Ser	Leu	Pro	Ala	Thr	Lys	Lys	Pro	Phe	Glu
					485					490					495	
4	Arg	Lys	Thr	Ile	Asp	Arg	Gln	Ser	Ala	Arg	Lys	Pro	Leu	Leu	Gly	Leu
				500					505					510		
]	Pro	Ser	Tyr	Met	Leu	Gln	Ser	Glu	Glu	Leu	Arg	Ala	Ser	Leu	Leu	Ala
			515					520					525			
	Arg	Tyr	Pro	Pro	Glu	Lys	Leu	Phe	Gln	Ala	Glu	Arg	Asn	Phe	Asn	Ala

	530					535					540				
Ala	Gln	Asp	Leu	Asp	Val	Ser	Leu	Leu	Glu	Gly	Asp	Leu	Val	Gly	Val
545					550					555					560
Ile	Lys	Lys	Lys	Asp	Pro	Met	Gly	Ser	Gln	Asn	Arg	Trp	Leu	Ile	Asp
				565					570		•			575	
Asn	Gly.	Val	Thr	Lys	Gly	Phe	Val	Tyr	Ser	Ser	Phe	Leu	Lys	Pro	Tyr
			580					585					590		
Asn	Pro	Arg	Arg	Ser	His	Ser	Asp	Ala	Ser	Val	Gly	Ser	His	Ser	Ser
		595					600					605			
Thr	Glu	Ser	Glu	His	Gly	Ser	Ser	Ser	Pro	Arg	Phe	Pro	Arg	Gln	Asn
	610					615					620				
Ser	Gly	Ser	Thr	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Met	Ala	Val	Ser	Phe
625					630					635					640
Thr	Ser	Gly	Ser	Cys	Gln	Lys	Gln	Pro	Gln	Asp	Ala	Ser	Pro	Pro	Pro
				645					650					655	
Lys	Glu	Trp	Asp	Gln	Gly	Thr	Leu	Ser	Ala	Ser	Leu	Asn	Pro	Ser	Asn
			660					665					670		
Ser	Glu	Ser	Ser	Pro	Ser	Arg	Cys	Pro	Ser	Asp	Pro	Asp	Ser	Thr	Ser
		675					680					685			
Gln	Pro	Arg	Ser	Gly	Asp	Ser	Ala	Asp	Val	Ala	Arg	Asp	Val	Lys	Gln
	690					695					700				
Pro	Thr	Ala	Thr	Pro	Arg	Ser	Tyr	Arg	Asn	Phe	Arg	His	Pro	Glu	Ile
705					710					715					720
Val	Gly	Tyr	Ser	Val	Pro	Gly	Arg	Asn	Gly	Gln	Ser	Gln	Asp	Leu	Val
				725					730					735	
Lys	Gly	Cys	Ala	Arg	Thr	Ala	Gln	Ala	Pro	Glu	Asp	Arg	Ser	Thr	Glu
			740					745					750		
Pro	Asp	Gly	Ser	Glu	Ala	Glu	Gly	Asn	Gln	Val	Tyr	Phe	Ala	Val	Tyr
		755					760					765			

Thr Phe Lys Ala Arg Asn Pro Asn Glu Leu Ser Val Ser Ala Asn Gln Lys Leu Lys Ile Leu Glu Phe Lys Asp Val Thr Gly Asn Thr Glu Trp Trp Leu Ala Glu Val Asn Gly Lys Lys Gly Tyr Val Pro Ser Asn Tyr Ile Arg Lys Thr Glu Tyr Thr <210> 3764 <211> 1079 <212> PRT <213> Homo sapiens <400> 3764 Met Asn His Met Phe His Ile Lys Arg His Ser Ile Ser Ala Gly Thr Asp Ala Tyr Lys Lys Thr Lys Pro Ile Gln Asn Leu Phe Gln Lys Pro Leu Tyr Asp His Cys Ser Ala Asn Asn Tyr Lys Ser Met Glu Pro Glu Leu Glu Asn Val Arg Ser Ser Pro Pro Arg Gly Asp Arg Thr Ser Lys Val Ser Leu Lys Glu Glu Leu Gln Gln Asp Met Gln Arg Phe Lys Asn

Glu Ile Gly Met Leu Lys Val Glu Phe Gln Ala Leu Glu Lys Glu Lys

Val Gln Leu Gln Lys Glu Val Glu Glu Glu Arg Lys Lys His Arg Asn

			100					105					110		
Asn	Glu	Met	Glu	Val	Ser	Ala	Asn	Ile	His	Asp	Gly	Ala	Thr	Asp	Asp
		115					120					125			
Ala	Glu	Asp	Asp	Asp	Asp	Asp	Asp	Gly	Leu	Ile	Gln	Lys	Arg	Lys	Ser
	130					135					140				
Gly	Glu	Thr	Asp	His	Gln	Gln	Phe	Pro	Arg	Lys	Glu	Asn	Lys	Glu	Tyr
145					150					155					160
Ala	Ser	Ser	Gly	Pro	Ala	Leu	Gln	Met	Lys	Glu	Val	Lys	Ser	Thr	Glu
				165					170					175	
Lys	Glu	Lys	Arg	Thr	Ser	Lys	Glu	Ser	Val	Asn	Ser	Pro	Val	Phe	Gly
			180					185					190		
Lys	Ala	Ser	Leu	Leu	Thr	Gly	Gly	Leu	Leu	Gln	Val	Asp	Asp	Asp	Ser
		195					200					205			
Ser	Leu	Ser	Glu	Ile	Asp	Glu	Asp	Glu	Gly	Arg	Pro	Thr	Lys	Lys	Thr
	210					215					220				
Ser	Asn	Glu	Lys	Asn	Lys	Val	Lys	Asn	Gln	Ile	Gln	Ser	Met	Asp	Asp
225					230					235					240
Val	Asp	Asp	Leu	Thr	Gln	Ser	Ser	Glu	Thr	Ala	Ser	Glu	Asp	Cys	Glu
				245					250					255	
Leu	Pro	His	Ser	Ser	Tyr	Lys	Asn	Phe	Met	Leu	Leu	Ile	Glu	Gln	Leu
			260					265					270		
Gly	Met	Glu	Cys	Lys	Asp	Ser	Val	Ser	Leu	Leu	Lys	Ile	Gln	Asp	Ala
		275					280					285			
Ala	Leu	Ser	Cys	Glu	Arg	Leu	Leu	Glu	Leu	Lys	Lys	Asn	His	Cys	Glu
	290					295					300				
Leu	Leu	Thr	Val	Lys	Ile	Lys	Lys	Met	Glu	Asp	Lys	Val	Asn	Val	Leu
305					310					315					320
Gln	Arg	Glu	Leu	Ser	Glu	Thr	Lys	Glu	Ile	Lys	Ser	Gln	Leu	Glu	His
				325					330					335	

Gln	Lys	Val	Glu	Trp	Glu	Arg	Glu	Leu	Cys	Ser	Leu	Arg	Phe	Ser	Leu
			340					345					350		
Asn	Gln	Glu	Glu	Glu	Lys	Arg	Arg	Asn	Ala	Asp	Thr	Leu	Tyr	Glu	Lys
		355					360					365			
Ile	Arg	Glu	Gln	Leu	Arg	Arg	Lys	Glu	Glu	Gln	Tyr	Arg	Lys	Glu	Val
	370					375					380				
Glu	Val	Lys	Gln	Gln	Leu	Glu	Leu	Ser	Leu	Gln	Thr	Leu	Glu	Met	Glu
385					390					395					400
Leu	Arg	Thr	Val	Lys	Ser	Asn	Leu	Asn	Gln	Val	Val	Gln	Glu	Arg	Asn
				405					410					415	
Asp	Ala	Gln	Arg	Gln	Leu	Ser	Arg	Glu	Gln	Asn	Ala	Arg	Met	Leu	Glr
			420					425					430		
Asp	Gly	Ile	Leu	Thr	Asn	His	Leu	Ser	Lys	Gln	Lys	Glu	Ile	Glu	Met
		435					440					445			
Ala	Gln	Lys	Lys	Met	Asn	Ser	Glu	Asn	Ser	His	Ser	His	Glu	Glu	Glu
	450					455					460				
Lys	Asp	Leu	Ser	His	Lys	Asn	Ser	Met	Leu	Gln	Glu	Glu	Ile	Ala	Met
465					470					475					480
Leu	Arg	Leu	Glu	Ile	Asp	Thr	Ile	Lys	Asn	Gln	Asn	Gln	Glu	Lys	Glu
				485					490					495	
Lys	Lys	Cys	Phe	Glu	Asp	Leu	Lys	Ile	Val	Lys	Glu	Lys	Asn	Glu	Asp
			500					505					510		
Leu	Gln	Lys	Thr	Ile	Lys	Gln	Asn	Glu	Glu	Thr	Leu	Thr	Gln	Thr	Ιlϵ
		515					520					525			
Ser	Gln	Tyr	Asn	Gly	Arg	Leu	Ser	Val	Leu	Thr	Ala	Glu	Asn	Ala	Met
	530					535					540				
Leu	Asn	Ser	Lys	Leu	Glu	Asn	Glu	Lys	Gln	Ser	Lys	Glu	Arg	Leu	Glu
545					550					555					560
Ala	Glu	Val	Glu	Ser	Tyr	His	Ser	Arg	Leu	Ala	Ala	Ala	Ile	His	Asp

				565					570					575	
Arg	Asp	Gln	Ser	Glu	Thr	Ser	Lys	Arg	Glu	Leu	Glu	Leu	Ala	Phe	Gln
			580					585					590		
Arg	Ala	Årg	Asp	Glu	Cys	Ser	Arg	Leu	Gln	Asp	Lys	Met	Asn	Phe	Asp
		595					600					605			
Val	Ser	Asn	Leu	Lys	Asp	Asn	Asn	Glu	Ile	Leu	Ser	Gln	Gln	Leu	Phe
	610					615					620				
Lys	Thr	Glu	Ser	Lys	Leu	Asn	Ser	Leu	Glu	Ile	Glu	Phe	His	His	Thr
625					630					635					640
Årg	Asp	Ala	Leu	Arg	Glu	Lys	Thr	Leu	Gly	Leu	Glu	Arg	Val	Gln	Lys
				645					650					655	
Asp	Leu	Ser	Gln	Thr	Gln	Cys	Gln	Met	Lys	Glu	Met	Glu	Gln	Lys	Tyr
			660					665					670		
Gln	Asn	Glu	Gln	Val	Lys	Val	Asn	Lys	Tyr	Ile	Gly	Lys	Gln	Glu	Ser
		675					680					685			
Val	Glu	Glu	Arg	Leu	Ser	Gln	Leu	Gln	Ser	Glu	Asn	Met	Leu	Leu	Arg
	690					695					700				
Gln	Gln	Leu	Asp	Asp	Ala	His	Asn	Lys	Ala	Asp	Asn	Lys	Glu	Lys	Thr
705					710					715					720
Val	Ile	Asn	Ile	Gln	Asp	Gln	Phe	His	Ala	Ile	Val	Gln	Lys	Leu	Gln
				725					730					735	
Ala	Glu	Ser	Glu	Lys	Gln	Ser	Leu	Leu	Leu	Glu	Glu	Arg	Asn	Lys	Glu
			740					745					750		
Leu	Ile	Ser	Glu	Cys	Asn	His	Leu	Lys	Glu	Arg	Gln	Tyr	Gln	Tyr	Glu
		755					760					765			
Asn	Glu	Lys	Ala	Glu	Arg	Glu	Val	Val	Val	Arg	Gln	Leu	Gln	Gln	Glu
	770					775					780				
Leu	Ala	Asp	Thr	Leu	Lys	Lys	Gln	Ser	Met	Ser	Glu	Ala	Ser	Leu	Glu
785					790					795					800

Val	Thr	Ser	Arg	Tyr	Arg	Ile	Asn	Leu	Glu	Asp	Glu	Thr	Gln	Asp	Leu
				805					810					815	
Lys	Lys	Lys	Leu	Gly	Gln	Ile	Arg	Asn	Gln	Leu	Gln	Glu	Ala	Gln	Asp
			820					825					830		
Arg	His	Thr	Glu	Ala	Val	Arg	Cys	Ala	Glu	Lys	Met	Gln	Asp	His	Lys
		835					840					845			
Gln	Lys	Leu	Glu	Lys	Asp	Asn	Ala	Lys	Leu	Lys	Val	Thr	Ile	Lys	Lys
	850					855					860				
Gln	Met	Asp	Lys	Ile	Glu	Glu	Leu	Gln	Lys	Asn	Leu	Leu	Asn	Ala	Asn
865					870					875					880
Leu	Ser	Glu	Asp	Glu	Lys	Glu	Gln	Leu	Lys	Lys	Leu	Met	Glu	Leu	Lys
				885					890					895	
Gln	Ser	Leu	Glu	Cys	Asn	Leu	Gly	Gln	Glu	Met	Lys	Lys	Asn	Val	Glu
			900					905					910		
Leu	Glu	Arg	Glu	Ile	Thr	Gly	Phe	Lys	Asn	Leu	Leu	Lys	Met	Thr	Arg
		915					920					925			
Lys	Lys	Leu	Asn	Glu	Tyr	Glu	Asn	Gly	Glu	Phe	Ser	Phe	His	Gly	Asp
	930					935					940				
Leu	Lys	Thr	Ser	Gln	Phe	Glu	Met	Asp	Ile	Gln	Ile	Asn	Lys	Leu	Lys
945					950					955					960
His	Lys	Ile	Asp	Asp	Leu	Thr	Ala	Glu	Leu	Glu	Thr	Ala	Gly	Ser	Lys
				965					970					975	
Cys	Leu	His	Leu	Asp	Thr	Lys	Asn	Gln	Ile	Leu	Gln	Glu	Glu	Leu	Leu
			980					985					990		
Ser	Met	Lys	Thr	Val	Gln	Lys	Lys	Cys	Glu	Lys	Leu	Gln	Lys	Asn	Lys
		995					1000					1005			
Lys	Lys	Leu	Glu	Gln	Glu	Val	Ile	Asn	Leu	Arg	Ser	His	Ile	Glu	Arg
	1010				-	1015				,	1020				
Asn	Met	Val	Glu	Leu	Gly	Gln	Val	Lys	Gln	Tyr	Lys	Gln	Glu	Ile	Glu

1025 1030 1035 1040

Glu Arg Ala Arg Gln Glu Ile Ala Glu Lys Leu Lys Glu Val Asn Leu
1045 1050 1055

Phe Leu Gln Ala Gln Ala Ala Ser Gln Glu Asn Leu Glu Gln Leu Arg
1060 1065 1070

Glu Lys Gln Asp Leu Pro Asp
1075

<210> 3765

<211> 577

<212> PRT

<213> Homo sapiens

20

<400> 3765

Met Lys His Leu Trp Phe Phe Phe Leu Leu Val Ala Ala Pro Arg Trp

1 5 10 15

Val Leu Ser Gln Val Gln Leu Gln Gly Ser Gly Pro Arg Leu Val Lys

Pro Ser Glu Thr Val Ser Leu Thr Cys Gly Val Ser Asp Ser Ile

35 40 45 Ser Arg Gly Tyr Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Ala Gly Lys

25

50 55 60

Gly Leu Glu Trp Ile Gly Arg Val Ala Ile Thr Gly Thr Thr Phe Tyr
65 70 75 80

Asn Pro Ser Phe Lys Gly Arg Val Thr Ile Ser Lys Ala Ser Phe Arg 85 90 95

Lys Glu Ile Ser Leu Glu Leu Asn Ser Leu Thr Ala Ala Asp Thr Ala 100 105 110

30

Thr	Tyr	Phe	Cys	Ala	Arg	Glu	Met	Gly	Pro	Arg	Gln	Trp	Gly	Phe	Ser
		115					120					125			
Ser	Asn	Asp	Ala	Phe	Glu	Ile	Trp	Asp	His	Gly	Ile	Leu	Val	Ile	Val
	130					135					140				
Ser	Pro	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Cys
145					150					155					160
Ser	Arg	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys
				165					170					175	
Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu
			180					185					190		
Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu
		195					200					205			
Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr
	.210					215					220				
Gln	Thr	Tyr	Thr	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val
225					230					235					240
Asp	Lys	Arg	Val	Glu	Leu	Lys	Thr	Pro	Leu	Gly	Asp	Thr	Thr	His	Thr
				245					250					255	
Cys	Pro	Arg	Cys	Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys
			260					265					270		
Pro	Arg	Cys	Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro
		275					280					285			
Arg	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe
	290					295					300				
Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val
305					310					315					320
Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln	Phe
				325					330					335	
Lvs	Trn	Tvr	Val	Asp	Glv	Val	Glu	Val	His	Asn	Ala	Lvs	Thr	Lvs	Pro

			340					345					350		
Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu	Thr
		355					360			•		365			
Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val
	370					375					380				
Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Thr
385					390					395					400
Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg
				405					410					415	
Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly
			420					425					430		
Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Ser	Gly	Gln	Pro
		435					440					445			
Glu	Asn	Asn	Tyr	Asn	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly	Ser
	450					455					460				
Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln
465					470					475					480
Gly	Asn	Ile	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	Arg
				485					490					495	
Phe	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Glu	Leu	Gln	Leu	Glu	Glu
			500					505					510		
Ser	Cys	Ala	Glu	Ala	Gln	Asp	Gly	Glu	Leu	Asp	Gly	Leu	Trp	Thr	Thr
		515					520					525			
Ile	Thr	Ile	Phe	Ile	Thr	Leu	Phe	Leu	Leu	Ser	Val	Cys	Tyr	Ser	Ala
	530					535					540				
Thr	Val	Thr	Phe	Phe	Lys	Val	Lys	Trp	Ile	Phe	Ser	Ser	Val	Val	Asp
545					550					555					560
Leu	Lys	Gln	Thr	Ile	Ile	Pro	Asp	Tyr	Arg	Asn	Met	Ile	Gly	Gln	Gly
				565					570					575	

Ala

<210> 3766

<211> 526

<212> PRT

<213> Homo sapiens

<400> 3766

Met Arg His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp

1 5 10 15

Val Leu Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Ala Leu Val Met

20 25 30

Pro Ser Gln Thr Leu Ser Leu Thr Cys Ser Val Ser Ala Gly Ser Ile

35 40 45

Ser Ser Gly Asp Tyr Tyr Trp Thr Trp Ile Arg Gln Leu Pro Glu Glu

50 55 60

Gly Leu Lys Trp Leu Gly Tyr Ile Ser Ser Ser Gly Thr Thr Tyr Tyr

65 70 75 80

Asn Pro Ser Leu Lys Ser Arg Leu Thr Leu Ser Met Glu Thr Ser Thr

85 90 95

Asn Arg Phe Ser Leu Arg Leu Thr Ser Met Thr Ala Ala Asp Thr Ala

100 105 110

Val Tyr Tyr Cys Ala Arg Gly Leu Arg Ser Gly Tyr Phe Asp Leu Trp

115 120 125

Gly Arg Gly Asn Val Val Thr Val Ser Ser Thr Pro Thr Lys Ala Pro

130 135 140

Asp Val Phe Pro Ile Ile Ser Gly Cys Arg His Pro Lys Asp Asn Ser

145					150					155					160
Pro	Val	Val	Leu	Ala	Cys	Leu	Ile	Thr	Gly	Tyr	His	Pro	Thr	Ser	Val
				165					170					175	
Thr	Val	Thr	Trp	Tyr	Met	Gly	Thr	Gln	Ser	Gln	Pro	Gln	Arg	Thr	Phe
			180					185					190		
Pro	Glu	Ile	Gln	Arg	Arg	Asp	Ser	Tyr	Tyr	Met	Thr	Ser	Ser	Gln	Leu
		195					200					205			
Ser	Thr	Pro	Leu	Gln	Gln	Trp	Arg	Gln	Gly	Glu	Tyr	Lys	Cys	Val	Val
	210					215					220				
Gln	His	Thr	Ala	Ser	Lys	Ser	Lys	Lys	Glu	Ile	Phe	Arg	Trp	Pro	Glu
225					230					235	٠				240
Ser	Pro	Lys	Ala	Gln	Ala	Ser	Ser	Val	Pro	Thr	Ala	Gln	Pro	Gln	Ala
				245					250					255	
Glu	Gly	Ser	Leu	Ala	Lys	Ala	Thr	Thr	Ala	Pro	Ala	Thr	Thr	Arg	Asn
			260					265					270		
Thr	Gly	Arg	Gly	Gly	Glu	Glu	Lys	Lys	Lys	Glu	Lys	Glu	Lys	Glu	Glu
		275					280					285			
Gln	Glu	Glu	Arg	Glu	Thr	Lys	Thr	Pro	Glu	Cys	Pro	Ser	His	Thr	Gln
	290					295					300				
Pro	Leu	Gly	Val	Tyr	Leu	Leu	Thr	Pro	Ala	Val	Gln	Asp	Leu	Trp	Leu
305					310					315					320
Arg	Asp	Lys	Ala	Thr	Phe	Thr	Cys	Phe	Val	Val	Gly	Ser	Asp	Leu	Lys
				325					330					335	
Asp	Ala	His	Leu	Thr	Trp	Glu	Val	Ala	Gly	Lys	Val	Pro	Thr	Gly	Gly
			340					345					350		
Val	Glu	Glu	Gly	Leu	Leu	Glu	Arg	His	Ser	Asn	Gly	Ser	Gln	Ser	Gln
		355					360					365			
His	Ser	Arg	Leu	Thr	Leu	Pro	Arg	Ser	Leu	Trp	Asn	Ala	Gly	Thr	Ser
	370					375					380				

Val Thr Cys Thr Leu Asn His Pro Ser Leu Pro Pro Gln Arg Leu Met Ala Leu Arg Glu Pro Ala Ala Gln Ala Pro Val Lys Leu Ser Leu Asn Leu Leu Ala Ser Ser Asp Pro Pro Glu Ala Ala Ser Trp Leu Leu Cys Glu Val Ser Gly Phe Ser Pro Pro Asn Ile Leu Leu Met Trp Leu Glu Asp Gln Arg Glu Val Asn Thr Ser Gly Phe Ala Pro Ala Arg Pro Pro Pro Gln Pro Arg Ser Thr Thr Phe Trp Ala Trp Ser Val Leu Arg Val Pro Ala Pro Pro Ser Pro Gln Pro Ala Thr Tyr Thr Cys Val Val Ser His Glu Asp Ser Arg Thr Leu Leu Asn Ala Ser Arg Ser Leu Glu Val Ser Cys Glu Ser Pro Pro Gly Pro Gly Leu Gly Arg Gly Leu

<210> 3767

<211> 737

<212> PRT

<213> Homo sapiens

<400> 3767

Met Leu Asp Lys Phe Ser Trp Ser Glu Leu Cys Ala Val Leu Gln Glu

1 5 10 15

Asn Val Asp Ala Leu Ile Ala Asp Leu Asn Arg Ala Asn Glu Lys Ile

			20					25					30		
Arg	His	Leu	Glu	Tyr	Ile	Cys	Lys	Asn	Lys	Ser	Asp	Thr	Met	Arg	Glu
		35					40					45			
Leu	Gln	Gln	Thr	Gln	Glu	Asp	Thr	Phe	Thr	Lys	Val	Ala	Glu	Gln	Ile
	50					55					60				
Lys	Ala	Gln	Glu	Ser	Cys	Trp	His	Arg	Gln	Lys	Lys	Glu	Leu	Glu	Leu
65					70					75					80
Gln	Tyr	Ser	Glu	Leu	Phe	Leu	Glu	Val	Gln	Lys	Arg	Ala	Gln	Lys	Phe
				85					90					95	
Gln	Glu	Ile	Ala	Glu	Lys	Asn	Met	Glu	Lys	Leu	Asn	His	Ile	Glu	Lys
			100					105					110		
Ser	His	Glu	Gln	Leu	Val	Leu	Glu	Asn	Ser	His	Phe	Lys	Lys	Leu	Leu
		115					120					125			
Ser	Gln	Thr	Gln	Arg	Glu	Gln	Met	Ser	Leu	Leu	Ala	Ala	Cys	Ala	Leu
	130					135					140				
Met	Ala	Gly	Ala	Leu	Tyr	Pro	Leu	Tyr	Ser	Arg	Ser	Cys	Ala	Leu	Ser
145					150					155					160
Thr	Gln	Arg	Asp	Phe	Leu	Gln	Glu	Gln	Val	Asn	Thr	Phe	Glu	Leu	Phe
				165					170					175	
Lys	Leu	Glu	Ile	Arg	Thr	Leu	Ala	Gln	Ala	Leu	Ser	Thr	Val	Glu	Glu
			180					185					190		
Lys	Lys	Gln	Glu	Glu	Ala	Lys	Met	Lys	Lys	Lys	Thr	Phe	Lys	Gly	Leu
		195					200					205			
Ile	Arg	Ile	Phe	Arg	Lys	Gly	Val	Ile	Ala	Val	Leu	Ala	Ala	Asn	Arg
	210					215					220				
Leu	Lys	Ile	Leu	Gly	Gln	Ser	Cys	Ala	Ser	Leu	Phe	Thr	Trp	Met	Glu
225					230					235					240
Ser	Phe	Lys	Glu	Gly	Ile	Gly	Met	Leu	Val	Cys	Thr	Gly	Glu	Pro	Gln
				245					250					255	

Asp	Lys	His	Lys	Phe	Pro	Lys	His	Gln	Lys	Glu	Gln	Leu	Arg	Cys	Leu
			260					265					270		
Gln	Ala	Leu	Ser	Trp	Leu	Thr	Ser	Ser	Asp	Leu	Leu	Ala	Ala	Ile	Ile
		275					280					285			
Ser	Ser	Met	Ala	Glu	Leu	Gln	Asp	Val	Ile	Gly	Lys	Ala	Asp	Pro	Asn
	290					295					300				
Ser	Arg	Ile	Cys	Gly	His	Leu	Leu	Ile	Gly	Ala	Ala	Lys	Asn	Ser	Phe
305					310					315					320
Ala	Lys	Leu	Met	Asp	Lys	Ile	Ser	Leu	Val	Met	Glu	Cys	Ile	Pro	Leu
				325					330					335	
His	Ser	Ser	Arg	Ser	Ile	Thr	Tyr	Val	Glu	Lys	Asp	Ser	Leu	Val	Gln
			340					345					350		
Arg	Leu	Ala	His	Gly	Leu	His	Lys	Val	Asn	Thr	Leu	Ala	Leu	Lys	Tyr
		355					360					365			
Gly	Leu	Arg	Gly	His	Val	Pro	Ile	Thr	Lys	Ser	Thr	Ala	Ser	Leu	Gln
	370					375					380				
Lys	Gln	Ile	Leu	Gly	Phe	Thr	Gln	Arg	Leu	His	Ala	Ala	Glu	Val	Glu
385					390					395					400
Arg	Arg	Ser	Leu	Arg	Leu	Glu	Val	Thr	Glu	Phe	Lys	Arg	Ser	Val	Asn
				405					410					415	
Glu	Met	Lys	Lys	Glu	Leu	Asp	Lys	Ala	Gln	Gly	Leu	Gln	Met	Gln	Leu
			420					425					430		
Asn	Glu	Phe	Lys	Gln	Ser	Lys	Leu	Ile	Thr	His	Glu	Lys	Phe	Glu	Ser
		435					440					445			
Ala	Cys	Glu	Glu	Leu	Asn	Asn	Ala	Leu	Leu	Arg	Glu	Glu	Gln	Ala	Gln
	450					455					460				
Met	Leu	Leu	Asn	Glu	Gln	Ala	Gln	Gln	Leu	Gln	Glu	Leu	Asn	Tyr	Arg
465					470					475					480
Leu	Glu	Leu	His	Ser	Ser	Glu	Glu	Ala	Asp	Lys	Asn	Gln	Thr	Leu	Gly

				485		•			490					495	
Glu	Ala	Val	Lys	Ser	Leu	Ser	Glu	Ala	Lys	Met	Glu	Leu	Arg	Arg	Lys
			500					505					510		
Asp	Gln	Ser	Leu	Arg	Gln	Leu	Asn	Arg	His	Leu	Thr	Gln	Leu	Glu	Gln
		515					520					525			
Asp	Lys	Arg	Arg	Leu	Glu	Glu	Asn	Ile	His	Asp	Ala	Glu	Ser	Ala	Leu
	530					535					540				
Arg	Met	Ala	Ala	Lys	Asp	Lys	Glu	Cys	Val	Ala	Asn	His	Met	Arg	Ala
545					550				•	555					560
Val	Glu	Asn	Thr	Leu	His	Lys	Val	Arg	Asp	Gln	Ile	Ser	Leu	Ser	Trp
				565					570					575	
Ser	Ala	Ala	Ser	Arg	Asn	Asp	Phe	Thr	Leu	Gln	Leu	Pro	Lys	Leu	His
			580					585					590		
Leu	Glu	Thr	Phe	Ala	Met	Glu	Gly	Leu	Lys	Gly	Gly	Pro	Glu	Val	Val
		595					600					605			
Ala	Cys	Gln	Ala	Met	Ile	Lys	Ser	Phe	Met	Asp	Val	Tyr	Gln	Leu	Ala
	610					615					620				
Ser	Thr	Arg	Ile	Met	Thr	Leu	Glu	Lys	Glu	Met	Thr	Ser	His	Arg	Ser
625					630					635					640
His	Ile	Ala	Ala	Leu	Lys	Ser	Glu	Leu	His	Thr	Ala	Cys	Leu	Arg	Glu
				645					650					655	
Asn	Ala	Ser	Leu	Gln	Ser	Ile	Gly	Ser	Arg	Asp	His	Ser	Asn	Leu	Ser
			660					665					670		
Ile	Pro	Ser	Arg	Ala	Pro	Leu	Pro	Ala	Asp	Thr	Thr	Gly	Ile	Gly	Asp
		675					680					685			
Phe	Leu	Pro	Leu	Lys	Ala	Glu	Leu	Asp	Thr	Thr	Tyr	Thr	Phe	Leu	Lys
	690					695					700				
Glu	Thr	Phe	Ile	Asn	Thr	Val	Pro	His	Ala	Leu	Thr	Ser	Ser	His	Ser
705					710					715					720

Ser Pro Val Thr Met Ser Ala Asn Ala Asn Arg Pro Thr Gln Ile Gly

Leu

<210> 3768

<211> 1020

<212> PRT

<213> Homo sapiens

<400> 3768

Met Trp Cys Thr Val Ser Trp Thr Cys Leu Gln Thr Ile Arg Phe Ser

Pro Asp Ile Phe Ser Ser Val Ser Val Pro Pro Ser Leu Lys Val Cys

Leu Asp Leu Ser Ala Glu Tyr Leu Ile Leu Ser Asp Val Gln Arg Lys

Val Leu Tyr Val Met Glu Leu Leu Gln Asn Gln Glu Glu Gly His Ala

Cys Phe Ser Ser Ile Ser Glu Phe Leu Leu Thr His Pro Val Leu Ser

Phe Gly Ile Gln Val Val Ser Arg Cys Arg Leu Arg His Thr Glu Val

Leu Pro Ala Glu Glu Glu Asn Asp Ser Leu Gly Ala Asp Gly Thr His

Gly Ala Gly Ala Met Glu Ser Ala Ala Gly Val Leu Ile Lys Leu Phe

Cys Val His Thr Lys Ala Leu Gln Asp Val Gln Ile Arg Phe Gln Pro

	130					135					140				
Gln	Leu	Asn	Pro	Asp	Val	Val	Ala	Pro	Leu	Pro	Thr	His	Thr	Ala	His
145					150					155					160
Glu	Asp	Phe	Thr	Phe	Gly	Glu	Ser	Arg	Pro	Glu	Leu	Gly	Ser	Glu	Gly
				165					170					175	
Leu	Gly	Ser	Ala	Ala	His	Gly	Ser	Gln	Pro	Asp	Leu	Arg	Arg	Ile	Val
			180					185					190		
Glu	Leu	Pro	Ala	Pro	Ala	Asp	Phe	Leu	Ser	Leu	Ser	Ser	Glu	Thr	Lys
		195					200					205			
Pro	Lys	Leu	Met	Thr	Pro	Asp	Ala	Phe	Met	Thr	Pro	Ser	Ala	Ser	Leu
	210					215					220				
Gln	Gln	Ile	Thr	Ala	Ser	Pro	Ser	Ser	Ser	Ser	Ser	Gly	Ser	Ser	Ser
225					230					235					240
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Leu	Thr	Ala	Val	Ser	Ala	Met	Ser
				245					250					255	
Ser	Thr	Ser	Ala	Val	Asp	Pro	Ser	Leu	Thr	Arg	Pro	Pro	Glu	Glu	Leu
			260					265					270		
Thr	Leu	Ser	Pro	Lys	Leu	Gln	Leu	Asp	Gly	Ser	Leu	Thr	Met	Ser	Ser
		275					280					285			
Ser	Gly	Ser	Leu	Gln	Alà	Ser	Pro	Arg	Gly	Leu	Leu	Pro	Gly	Leu	Leu
	290					295					300				
Pro	Ala	Pro	Ala	Asp	Lys	Leu	Thr	Pro	Lys	Gly	Pro	Gly	Gln	Val	Pro
305					310					315					320
Thr	Ala	Thr	Ser	Ala	Leu	Ser	Leu	Glu	Leu	Gln	Glu	Val	Glu	Pro	Leu
				325					330					335	
Gly	Leu	Pro	Gln	Ala	Ser	Pro	Ser	Arg	Thr	Arg	Ser	Pro	Asp	Val	Ile
			340					345					350		
Ser	Ser	Ala	Ser	Thr	Ala	Leu	Ser	Gln	Asp	Ile	Pro	Glu	Ile	Ala	Ser
		355					360					365			

Glu	Ala	Leu	Ser	Arg	Gly	Phe	Gly	Ser	Ser	Ala	Pro	Glu	Gly	Leu	Glu
	370					375					380				
Pro	Asp	Ser	Met	Ala	Ser	Ala	Ala	Ser	Ala	Leu	His	Leu	Leu	Ser	Pro
385					390					395					400
Arg	Pro	Arg	Pro	Gly	Pro	Glu	Leu	Gly	Pro	Gln	Leu	Gly	Leu	Asp	Gly
				405					410					415	
Gly	Pro	Gly	Asp	Gly	Asp	Arg	His	Asn	Thr	Pro	Ser	Leu	Leu	Glu	Ala
			420					425					430		
Ala	Leu	Thr	Gln	Glu	Ala	Ser	Thr	Pro	Asp	Ser	Gln	Val	Trp	Pro	Thr
		435					440					445			
Ala	Pro	Asp	Ile	Thr	Arg	Glu	Thr	Cys	Ser	Thr	Leu	Ala	Glu	Ser	Pro
	450					455					460				
Arg	Asn	Gly	Leu	Gln	Glu	Lys	His	Lys	Ser	Leu	Ala	Phe	His	Arg	Pro
465					470					475					480
Pro	Tyr	His	Leu	Leu	Gln	Gln	Arg	Asp	Ser	Gln	Asp	Ala	Ser	Ala	Glu
				485					490					495	
Gln	Ser	Asp	His	Asp	Asp	Glu	Val	Ala	Ser	Leu	Ala	Ser	Ala	Ser	Gly
			500					505					510		
Gly	Phe	Gly	Thr	Lys	Val	Pro	Ala	Pro	Arg	Leu	Pro	Ala	Lys	Asp	Trp
		515					520					525			
Lys	Thr	Lys	Gly	Ser	Pro	Arg	Thr	Ser	Pro	Lys	Leu	Lys	Arg	Lys	Ser
	530					535					540				
Lys	Lys	Asp	Asp	Gly	Asp	Ala	Ala	Met	Gly	Ser	Arg	Leu	Thr	Glu	His
545					550					555					560
Gln	Val	Ala	Glu	Pro	Pro	Glu	Asp	Trp	Pro	Ala	Leu	Ile	Trp	Gln	Gln
				565					570					575	
Gln	Arg	Glu	Leu	Ala	Glu	Leu	Arg	His	Ser	Gln	Glu	Glu	Leu	Leu	Glr
			580					585					590		
Aro	Ĭωι	Cve	Thr	Gln	Len	Glu	Glv	Leu	Gln	Ser	Thr	Val	Thr	Glv	His

		595					600					605			
Val	Glu	Arg	Ala	Leu	Glu	Thr	Arg	His	Glu	Gln	Glu	Gln	Arg	Arg	Leu
	610					615					620				
Glu	Arg	Ala	Leu	Ala	Glu	Gly	Gln	Gln	Arg	Gly	Gly	Gln	Leu	Gln	Glu
625					630					635					640
Gln	Leu	Thr	Gln	Gln	Leu	Ser	Gln	Ala	Leu	Ser	Ser	Ala	Val	Ala	Gly
				645					650					655	
Arg	Leu	Glu	Arg	Ser	Ile	Arg	Asp	Glu	Ile	Lys	Lys	Thr	Val	Pro	Pro
			660					665					670		
Cys	Val	Ser	Arg	Ser	Leu	Glu	Pro	Met	Ala	Gly	Gln	Leu	Ser	Asn	Ser
		675					680					685			
Val	Ala	Thr	Lys	Leu	Thr	Ala	Val	Glu	Gly	Ser	Met	Lys	Glu	Asn	İle
	690					695					700				
Ser	Lys	Leu	Leu	Lys	Ser	Lys	Asn	Leu	Thr	Asp	Ala	Ile	Ala	Arg	Ala
705					710					715					720
Ala	Ala	Asp	Thr	Leu	Gln	Gly	Pro	Met	Gln	Ala	Ala	Tyr	Arg	Glu	Ala
				725					730					735	
Phe	Gln	Ser	Val	Val	Leu	Pro	Ala	Phe	Glu	Lys	Ser	Cys	Gln	Ala	Met
			740					745					750		
Phe	Gln	Gln	Ile	Asn	Asp	Ser	Phe	Arg	Leu	Gly	Thr	Gln	Glu	Tyr	Leu
		755					760					765			
Gln	Gln	Leu	Glu	Ser	His	Met	Lys	Ser	Arg	Lys	Ala	Arg	Glu	Gln	Glu
	770					775					780				
Ala	Arg	Glu	Pro	Val	Leu	Ala	Gln	Leu	Arg	Gly	Leu	Val	Ser	Thr	Leu
785					790					795					800
Gln	Ser	Ala	Thr	Glu	Gln	Met	Ala	Ala	Thr	Val	Ala	Gly	Ser	Val	Arg
				805					810					815	
Ala	Glu	Val	Gln	His	Gln	Leu	His	Val	Ala	Val	Gly	Ser	Leu	Gln	Glu
			820					825					830		

Ser Ile Leu Ala Gln Val Gln Arg Ile Val Lys Gly Glu Val Ser Val 835 840 845

Ala Leu Lys Glu Gln Gln Ala Ala Val Thr Ser Ser Ile Met Gln Ala 850 855 860

Met Arg Ser Ala Ala Gly Thr Pro Val Pro Ser Ala His Leu Asp Cys

865 870 875 880

Gln Ala Gln Gln Ala His Ile Leu Gln Leu Leu Gln Gln Gly His Leu

885 890 895

Asn Gln Ala Phe Gln Gln Ala Leu Thr Ala Ala Asp Leu Asn Leu Val 900 905 910

Leu Tyr Val Cys Glu Thr Val Asp Pro Ala Gln Val Phe Gly Gln Pro 915 920 925

Pro Cys Pro Leu Ser Gln Pro Val Leu Leu Ser Leu Ile Gln Gln Leu 930 935 940

Ala Ser Asp Leu Gly Thr Arg Thr Asp Leu Lys Leu Ser Tyr Leu Glu 945 950 955 960

Glu Ala Val Met His Leu Asp His Ser Asp Pro Ile Thr Arg Asp His
965 970 975

Met Gly Ser Val Met Ala Gln Val Arg Gln Lys Leu Phe Gln Phe Leu 980 985 990

Gln Ala Glu Pro His Asn Ser Leu Gly Lys Ala Ala Arg Arg Leu Ser 995 1000 1005

Leu Met Leu His Gly Leu Val Thr Pro Ser Leu Pro 1010 1015 1020

<210> 3769

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3769

Met Asn Ala Ile Leu Gln Ser Leu Ser Ser Leu Gln Ser Phe Ala Asn

1 5 10 15

Asp Leu Leu Lys Gln Gly Ile Pro Trp Lys Lys Ile Pro Leu Asn Ala
20 25 30

Leu Ile Arg Arg Phe Ala His Leu Leu Val Lys Lys Asp Ile Cys Asn
35 40 45

Ser Glu Thr Lys Lys Asp Leu Leu Lys Lys Val Lys Asn Ala Ile Ser 50 55 60

Ala Thr Ala Glu Arg Phe Ser Gly Tyr Met Gln Asn Asp Ala His Glu
65 70 75 80

Phe Leu Ser Gln Cys Leu Asp Gln Leu Lys Glu Asp Met Glu Lys Leu
85 90 95

Asn Lys Thr Trp Lys Thr Glu Pro Val Ser Gly Glu Glu Asn Ser Pro
100 105 110

Asp Ile Ser Ala Thr Arg Ala Tyr Thr Cys Pro Val Ile Thr Asn Leu 115 120 125

Glu Phe Glu Val Gln His Ser Ile Ile Cys Lys Ala Cys Gly Glu Ile 130 135 140

Ile Pro Lys Arg Glu Gln Phe Asn Asp Leu Ser Ile Asp Leu Pro Arg 145 150 155 160

Arg Lys Lys Pro Leu Pro Pro Arg Ser Ile Gln Asp Ser Leu Asp Leu 165 170 175

Phe Phe Arg Ala Glu Glu Leu Glu Tyr Ser Cys Glu Lys Cys Gly Gly
180 185 190

Lys Cys Ala Leu Val Arg His Lys Phe Asn Arg Leu Pro Arg Val Leu 195 200 205

Ile	Leu	His	Leu	Lys	Arg	Tyr	Ser	Phe	Asn	Val	Ala	Leu	Ser	Leu	Asn
	210					215					220				
Asn	Lys	Ile	Gly	Gln	Gln	Val	Ile	Ile	Pro	Arg	Tyr	Leu	Thr	Leu	Ser
225					230					235					240
Ser	His	Cys	Thr	Glu	Asn	Thr	Lys	Pro	Pro	Phe	Thr	Leu	Gly	Trp	Ser
				245					250					255	
Ala	His	Met	Ala	Ile	Ser	Arg	Pro	Leu	Lys	Ala	Ser	Gln	Met	Val	Asn
			260					265					270		
Ser	Cys	Ile	Thr	Ser	Pro	Ser	Thr	Pro	Ser	Lys	Lys	Phe	Thr	Phe	Lys
		275					280					285			
Ser	Lys	Ser	Ser	Leu	Ala	Leu	Cys	Leu	Asp	Ser	Asp	Ser	Glu	Asp	Glu
	290					295					300				
Leu	Lys	Arg	Ser	Val	Ala	Leu	Ser	Gln	Arg	Leu	Cys	Glu	Met	Leu	Gly
305					310					315					320
Asn	Glu	Gln	Gln	Gln	Glu	Asp	Leu	Glu	Lys	Asp	Ser	Lys	Leu	Cys	Pro
				325					330			٠		335	
Ile	Glu	Pro	Asp	Lys	Ser	Glu	Leu	Glu	Asn	Ser	Gly	Phe	Asp	Arg	Met
			340					345					350		
Ser	Glu	Glu	Glu	Leu	Leu	Ala	Ala	Val	Leu	Glu	Ile	Ser	Lys	Arg	Asp
		355					360					365			
Ala	Ser	Pro	Ser	Leu	Ser	His	Glu	Asp	Asp	Asp	Lys	Pro	Thr	Ser	Ser
	370					375					380				
Pro	Asp	Thr	Gly	Phe	Ala	Glu	Asp	Asp	Ile		Glu	Met	Pro	Glu	
385					390					395					400
Pro	Asp	Thr	Met	Glu	Thr	Glu	Lys	Pro	Lys	Thr	Ile	Thr	Glu		Asp
				405					410					415	
Pro	Ala	Ser		Thr	Glu	Ile	Thr		Asp	Cys	Asp	Glu		Lys	Glu
	_		420			_		425				_	430	۵.	۵.
Asn	Lvs	Thr	Pro	Glu	Glv	Ser	Gln	(ilv	Glu	Val	Asp	Trp	Leu	Gln	Gln

Tyr Asp Met Glu Arg Glu Arg Glu Glu Glu Leu Gln Gln Ala Leu Ala Gln Ser Leu Gln Glu Gln Glu Ala Trp Glu Gln Lys Glu Asp Asp Asp Leu Lys Arg Ala Thr Glu Leu Ser Leu Gln Glu Phe Asn Asn Ser Phe Val Asp Ala Leu Gly Ser Asp Glu Asp Ser Gly Asn Glu Asp Val Phe Asp Met Glu Tyr Thr Glu Ala Glu Ala Glu Glu Leu Lys Arg Asn Ala Glu Thr Gly Asn Leu Pro His Ser Tyr Arg Leu Ile Ser Val Val , 530 Ser His Ile Gly Ser Thr Ser Ser Ser Gly His Tyr Ile Ser Asp Val Tyr Asp Ile Lys Lys Gln Ala Trp Phe Thr Tyr Asn Asp Leu Glu Val Ser Lys Ile Gln Glu Ala Ala Val Gln Ser Asp Arg Asp Arg Ser Gly Tyr Ile Phe Phe Tyr Met His Lys Glu Ile Phe Asp Glu Leu Leu Glu Thr Glu Lys Asn Ser Gln Ser Leu Ser Thr Glu Val Gly Lys Thr Thr

<210> 3770

Arg Gln Ala Ser

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3770

Met Ala Pro Pro Pro Lys Glu Val Glu Glu Asp Ser Glu Asp Glu Glu

1 5 10 15

Met Ser Glu Asp Glu Glu Asp Asp Ser Ser Gly Glu Glu Val Val Ile 20 25 30

Pro Gln Lys Lys Gly Lys Lys Ala Ala Ala Thr Ser Ala Lys Lys Val
35 40 45

Val Val Ser Pro Thr Lys Lys Val Ala Val Ala Thr Pro Ala Lys Lys
50 55 60

Ala Ala Val Thr Pro Gly Lys Lys Ala Ala Ala Thr Pro Ala Lys Lys
65 70 75 80

Thr Val Thr Pro Ala Lys Ala Val Thr Thr Pro Gly Lys Lys Gly Ala
85 90 95

Thr Pro Gly Lys Ala Leu Val Ala Thr Pro Gly Lys Lys Gly Ala Ala 100 105 110

Ile Pro Ala Lys Gly Ala Lys Asn Gly Lys Asn Ala Lys Lys Glu Asp 115 120 125

Ser Asp Glu Glu Glu Asp Asp Ser Glu Glu Asp Glu Glu Asp Asp 130 135 140

Glu Asp Glu Asp Glu Asp Glu Ile Glu Pro Ala Ala Met Lys 145 150 155 160

Ala Ala Ala Ala Pro Ala Ser Glu Asp Glu Asp Glu Asp Asp

165 170 175

Glu Asp Asp Glu Asp Asp Asp Asp Glu Glu Asp Asp Ser Glu Glu
180 185 190

Glu Ala Met Glu Thr Thr Pro Ala Lys Gly Lys Lys Ala Ala Lys Val

195	•		200		205	
Val Pro Val	Lys Ala	Lys Asn	Val Ala	Glu Asp	Gln Asp	Glu Glu Glu
210		215			220	
Asp Asp Glu	Asp Glu	Asp Asp	Asp Asp	Asp Glu	Asp Asp	Glu Asp Asp
225		230		235		240
Asp Asp Glu	ı Asp Asp	Glu Glu	Glu Glu	Glu Glu	Glu Glu	Glu Glu Pro
	245			250		255
Val Lys Glu	ı Ala Pro	Gly Lys	Arg Lys	Lys Glu	Met Ala	Lys Gln Lys
	260		265			270
Ala Ala Pro	Glu Ala	Lys Lys	Gln Lys	Val Glu	Gly Thr	Glu Pro Thr
275	;		280		285	
Thr Ala Phe	Asn Leu	Phe Val	Gly Asn	Leu Asn	Phe Asn	Lys Ser Ala
290		295			300	
Pro Glu Leu	Lys Thr	Gly Ile	Ser Asp	Val Phe	Ala Lys	Asn Asp Leu
305		310		315		320
Ala Val Val	Asp Val	Arg Ile	Gly Met	Thr Arg	Lys Phe	Gly Tyr Val
	325			330		335
Asp Phe Glu	ı Ser Ala	Glu Asp	Leu Glu	Lys Ala	Leu Glu	Leu Thr Gly
	340		345			350
Leu Lys Val	Phe Gly	Asn Glu	Ile Lys	Leu Glu	Lys Pro	Lys Gly Lys
355	5		360		365	
Asp Ser Lys	Lys Gly	Met				
370						

<210> 3771

<211> 218

<212> PRT

<213> Homo sapiens

<400> 3771

Met Pro Asp Gln Asp Lys Lys Val Lys Thr Thr Glu Lys Ser Thr Asp

1 5 10 15

Lys Gln Gln Glu Ile Thr Ile Arg Asp Tyr Ser Asp Leu Lys Arg Leu 20 25 30

Arg Cys Leu Leu Asn Val Gln Ser Ser Lys Gln Gln Leu Pro Ala Ile 35 40 45

Asn Phe Asp Ser Ala Gln Asn Ser Met Thr Lys Ser Glu Pro Ala Ile
50 55 60

Arg Ala Gly Gly His Arg Ala Arg Gly Gln Trp His Glu Ser Thr Glu
65 70 75 80

Ala Val Glu Leu Glu Asn Phe Ser Ile Asn Tyr Lys Asn Glu Arg Asn 85 90 95

Phe Ser Lys His Pro Gln Arg Lys Leu Phe Gln Glu Ile Phe Thr Ala 100 105 110

Leu Val Lys Asn Arg Leu Ile Ser Arg Glu Trp Val Asn Arg Ala Pro 115 120 125

Ser Ile His Phe Leu Arg Val Leu Ile Cys Leu Arg Leu Leu Met Arg
130 135 140

Asp Pro Cys Tyr Gln Glu IIe Leu His Ser Leu Gly Gly IIe Glu Asn 145 150 155 160

Leu Ala Gln Tyr Met Glu Ile Val Ala Asn Glu Tyr Leu Gly Tyr Gly
165 170 175

Glu Glu Gln His Thr Val Asp Lys Leu Val Asn Met Thr Cys Lys Cys
180 185 190

Tyr Cys Arg Asp Thr Ala Ile Phe Val Asp Leu Leu Glu Lys Ala Val 195 200 205

Trp Cys Leu Gln Gln Glu Thr Arg Ile Leu

210 215

<210> 3772

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3772

Met Met Leu Gln Gly Pro Lys Pro Met Arg Ser Ser Gln Leu Met Gln

1 5 10 15

Ser Ser Gly Arg Ser Gly Ser Ser Leu Val Ser Pro Phe Ser Ser Ala

20 25 30

Thr Ala Ala Leu Pro Pro Ser Leu Asn Leu Thr Thr Pro Ala Ser Thr

35 40 45

Ser Gln Asp Ala Ser Gln Cys Gln Pro Ser Pro Asp Phe Ser His Asp

50 55 60

Arg Gln Leu Arg Leu Leu Ser Gln Pro Ile Gln Pro Met Met Pro

65 70 75 80

Gly Ser Cys Asp Ala Arg Gln Pro Ser Glu Val Ser Arg Thr Gly Arg

85 90 95

Gln Val Lys Tyr Ala Gln Ser Gln Thr Val Phe Gln Asn Pro Asp Ala

100 105 110

His Pro Ala Asn Ser Ser Ser Ala Pro Met Pro Val Leu Leu Met Gly

115 120 125

Gln Ala Val Leu His Pro Ser Phe Pro Ala Ser Gln Pro Ser Pro Leu

130 135 140

Gln Pro Ala Gln Ala Arg Gln Gln Pro Pro Gln His Tyr Leu Gln Val

145 150 155 160

Gln Ala Pro Thr Ser Leu His Ser Glu Gln Gln Asp Ser Leu Leu Leu

165
170
175

Ser Thr Tyr Ser Gln Gln Pro Gly Thr Leu Gly Tyr Pro Gln Pro Pro
180
185
190

Pro Ala Gln Pro Gln Pro Leu Arg Pro Pro Arg Arg Val Ser Ser Leu
195
200

Ser Glu Ser Ser Gly Leu Gln Gln Pro Pro Arg

Ser Glu Ser Ser Gly Leu Gln Gln Pro Pro Arg 210 215

<210> 3773

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3773

Met Arg Arg Ser Trp Lys Met Ala Leu Ser Gly Gly Leu Arg Cys Cys

1 5 10 15

Arg Arg Val Leu Ser Trp Val Pro Val Leu Val Ile Val Leu Val Val
20 25 30

Leu Trp Ser Tyr Tyr Ala Tyr Val Phe Glu Leu Cys Leu Val Ile Tyr
35 40 45

Leu Ile Leu Tyr His Ala Ile Phe Val Phe Phe Thr Trp Thr Tyr Trp
50 55 60

Lys Ser Ile Phe Thr Leu Pro Gln Gln Pro Asn Gln Lys Phe His Leu 65 70 75 80

Ser Tyr Thr Asp Lys Glu Arg Tyr Glu Asn Glu Glu Arg Pro Glu Val 85 90 95

Gln Lys Gln Met Leu Val Asp Met Ala Lys Lys Leu Pro Val Tyr Thr

			100					105					110		
Arg	Thr	Gly	Ser	Gly	Ala	Val	Arg	Phe	Cys	Asp	Arg	Cys	His	Leu	Ile
		115					120					125			
Lys	Pro	Asp	Arg	Cys	His	His	Cys	Ser	Val	Cys	Ala	Met	Cys	Val	Leu
	130					135					140				
Lys	Met	Asp	His	His	Cys	Pro	Trp	Val	Asn	Asn	Cys	Ile	Gly	Phe	Ser
145					150					155					160
Asn	Tyr	Lys	Phe	Phe	Leu	Gln	Phe	Leu	Ala	Tyr	Ser	Val	Leu	Tyr	Cys
				165					170					175	
Leu	Tyr	Ile	Ala	Thr	Thr	Val	Phe	Ser	Tyr	Phe	Ile	Lys	Tyr	Trp	Arg
			180					185					190		
Gly	Glu	Leu	Pro	Ser	Val	Arg	Ser	Lys	Phe	His	Val	Leu	Phe	Leu	Leu
		195					200					205			
Phe	Val	Ala	Cys	Met	Phe	Phe	Val	Ser	Leu	Val	Ile	Leu	Phe	Gly	Tyr
	210					215					220				
His	Cys	Trp	Leu	Val	Ser	Arg	Asn	Lys	Thr	Thr	Leu	Glu	Ala	Phe	Cys
225					230					235					240
Thr	Pro	Val	Phe	Thr	Ser	Gly	Pro	Glu	Lys	Asn	Gly	Phe	Asn	Leu	Gly
				245					250					255	
Phe	Ile	Lys	Asn	Ile	Gln	Gln	Val	Phe	Gly	Asp	Lys	Lys	Lys	Phe	Trp
			260					265					270		
Leu	Ile	Pro	Ile	Gly	Ser	Ser	Pro	Gly	Asp	Gly	His	Ser	Phe	Pro	Met
		275					280					285			
Arg	Ser	Met	Asn	Glu	Ser	Gln	Asn	Pro	Leu	Leu	Ala	Asn	Glu	Glu	Thr
	290					295					300				
Trp	Glu	Asp	Asn	Glu	Asp	Asp	Asn	Gln	Asp	Tyr	Pro	Glu	Gly	Ser	Ser
305					310					315					320
Ser	Leu	Ala	Val	Glu	Thr	Glu	Thr								
				325											

<210> 3774

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3774

Met Glu Asp Pro Cys Ser Asn Thr Ser Cys Val Pro Pro Thr Thr Trp

1 5 10 15

Thr Ala Val Pro Pro Ser Ala Leu Gly Pro Gln Arg Asn Arg Ser Val 20 25 30

Ala Ser Phe Phe Ser Tyr Leu Gln Ile Pro Gly Arg Pro Arg Arg Cys
35 40 45

Leu Leu Gly Ala Met Ser Ser Cys Ser Ala Ser Ser Cys Pro Arg Lys
50 55 60

Ser Ser Gly Val Gln Gly Cys Pro Lys Pro Ala Ala Pro Ser Arg Leu 65 70 75 80

Val Pro Pro Ile Leu Asp Ile Trp Ala Pro Leu Ser Pro Lys Thr Leu

85 90 95

Pro Leu Gly Gly Pro Arg Ser Val Cys Val Ser Phe Ser Leu Pro Ala 100 105 110

Cys Leu Cys Ile Leu Ser Pro Glu Val Pro Ser Leu His Pro Arg Thr
115 120 125

Leu Val Thr Ser Phe Glu Gly Lys His Gly Ser Val Arg Tyr Cys Ile 130 135 140

Lys Ala Thr Leu His Arg Pro Trp Val Pro Ala Arg Arg Ala Arg Lys
145 150 155 160

Val Phe Thr Val Ile Glu Pro Val Asp Ile Asn Thr Pro Ala Leu Leu

165 170 175

Val Ser Gly His Pro Trp Gly Gly Arg Leu Gly Val Leu 180 185

<210> 3775

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3775

Met Gly Gln Asp Tyr Tyr Ser Val Leu Gly Ile Thr Arg Asn Ser Glu

1 5 10 15

Asp Ala Gln Ile Lys Gln Ala Tyr Arg Arg Leu Ala Leu Lys His His
20 25 30

Pro Leu Lys Ser Asn Glu Pro Ser Ser Ala Glu Ile Phe Arg Gln Ile 35 40 45

Ala Glu Ala Tyr Asp Val Leu Ser Asp Pro Met Lys Arg Gly Ile Tyr
50 55 60

Asp Lys Phe Gly Glu Glu Gly Leu Lys Gly Gly Ile Pro Leu Glu Phe
65 70 75 80

Gly Ser Gln Thr Pro Trp Thr Thr Gly Tyr Val Phe His Gly Lys Pro
85 90 95

Glu Lys Val Phe His Glu Phe Phe Gly Gly Asn Asn Pro Phe Ser Gly
100 105 110

Lys Arg Ser Ser Ser Pro Thr Leu Pro Tyr Arg Glu Arg Thr Leu Leu 115 120 125 <210> 3776

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3776

Met Ser Asp Ser Arg Leu Thr Thr Asn Asp Leu His Ile Val Pro Tyr

1 5 10 15

Leu Glu Asp Met Ser Glu Arg Glu Asp Gln Asn Pro Thr Ser Thr Ser

20 25 30

Glu Arg Asn Gln Pro Ala Phe Thr Trp Gln Glu Val Gly Ser Gly Ile

35 40 45

Cys Met Gly Phe Pro Leu Gln Gln Ala Glu Ala Ala Leu Ala Cys Pro

50 55 60

Leu Pro Thr Lys Leu Phe Trp Pro Trp Lys Gly Ala His Ser Ser Ser

65 70 75 80

Ile Arg Tyr Ser Leu Gly Arg Ala Asp Ser Gln Gly Gly Ser Ser Phe

85 90 95

Tyr Ser Gln Gly Ala Gly Ile

100

<210> 3777

<211> 612

<212> PRT

<213> Homo sapiens

<400> 3777

Met Trp Met His Cys Cys Trp Ala Trp Pro Pro Arg Ser Gln Ser Glu

1				5					10					15	
Arg	Thr	Met	Cys	Trp	Leu	Lys	Met	Cys	Gly	Val	Ser	Leu	Arg	Leu	Ser
			20					25					30		
Leu	Gln	Val	Val	Asn	Ser	Trp	Pro	Leu	Gly	Arg	Gly	Ser	Ala	Gly	Leu
		35					40					45			
Pro	Glu	Pro	Asp	Phe	Trp	Pro	Gly	Pro	Leu	Glu	Phe	Ser	Arg	Thr	Asp
	50					55					60				
His	Leu	Ala	Ser	Cys	Leu	Gln	Arg	Gly	Arg	Asp	Leu	Gly	Leu	Pro	Ser
65					70					75					80
Tyr	Thr	Lys	Ala	Arg	Ala	Ala	Leu	Gly	Leu	Ser	Pro	Ile	Thr	Arg	Trp
				85					90					95	
Gln	Asp	Ile	Asn	Pro	Ala	Leu	Ser	Arg	Ser	Asn	Asp	Thr	Val	Leu	Glu
			100					105					110		
Ala	Thr	Ala	Ala	Leu	Tyr	Asn	Gln	Asp	Leu	Ser	Trp	Leu	Glu	Leu	Leu
		115					120					125			
Pro	Gly	Gly	Leu	Leu	Glu	Ser	His	Arg	Asp	Pro	Gly	Pro	Leu	Phe	Ser
	130					135					140				
Thr	Ile	Val	Leu	Glu	Gln	Phe	Val	Arg	Leu	Arg	Asp	Gly	Asp	Arg	Tyr
145					150					155					160
Trp	Phe	Glu	Asn	Thr	Arg	Asn	Gly	Leu	Phe	Ser	Lys	Lys	Glu	Ile	Glu
				165					170					175	
Glu	Ile	Arg	Asn	Thr	Thr	Leu	Gln	Asp	Val	Leu	Val	Ala	Val	Ile	Asn
			180					185					190		
Ile	Asp	Pro	Ser	Ala	Leu	Gln	Pro	Asn	Val	Phe	Val	Trp	His	Lys	Gly
		195					200					205			
Asp	Pro	Cys	Pro	Gln	Pro	Arg	Gln	Leu	Ser	Thr	Glu	Gly	Leu	Pro	Ala
	210					215					220				
Cys	Ala	Pro	Ser	Val	Val	Arg	Asp	Tyr	Phe	Glu	Gly	Ser	Gly	Phe	Gly
225					230					235					240

Phe	Gly	Val	Thr	Ile	Gly	Thr	Leu	Cys	Cys	Phe	Pro	Leu	Val	Ser	Leu
				245					250					255	
Leu	Ser	Ala	Trp	Ile	Val	Ala	Arg	Leu	Arg	Met	Arg	Asn	Phe	Lys	Arg
			260					265					270		
Leu	Gln	Gly	Gln	Asp	Arg	Gln	Ser	Ile	Val	Ser	Glu	Lys	Leu	Val	Gly
		275					280					285			
Gly	Met	Glu	Ala	Leu	Glu	Trp	Gln	Gly	His	Lys	Glu	Pro	Cys	Arg	Pro
	290					295					300				
Val	Leu	Val	Tyr	Leu	Gln	Pro	Gly	Gln	Ile	Arg	Val	Val	Asp	Gly	Arg
305					310					315					320
Leu	Thr	Val	Leu	Arg	Thr	Ile	Gln	Leu	Gln	Pro	Pro	Gln	Lys	Val	Asn
				325					330					335	
Phe	Val	Leu	Ser	Ser	Asn	Arg	Gly	Arg	Arg	Thr	Leu	Leu	Leu	Lys	Ile
			340					345					350		
Pro	Lys	Glu	Tyr	Asp	Leu	Val	Leu	Leu	Phe	Asn	Leu	Glu	Glu	Glu	Arg
		355					360					365			
Gln	Ala	Leu	Val	Glu	Asn	Leu	Arg	Gly	Ala	Leu	Lys	Glu	Ser	Gly	Leu
	370					375					380				
Ser	Ile	Gln	Glu	Trp	Glu	Leu	Arg	Glu	Gln	Glu	Leu	Met	Arg	Ala	Ala
385					390					395					400
Val	Thr	Arg	Glu	Gln	Arg	Arg	His	Leu	Leu	Glu	Thr	Phe	Phe	Arg	His
				405					410					415	
Leu	Phe	Ser	Gln	Val	Leu	Asp	Ile	Asn	Gln	Ala	Asp	Ala	Gly	Thr	Leu
			420					425					430		
Pro	Leu	Asp	Ser	Ser	Gln	Lys	Val	Arg	Glu	Ala	Leu	Thr	Cys	Glu	Leu
		435					440					445			
Ser	Arg	Ala	Glu	Phe	Ala	Glu	Ser	Leu	Gly	Leu	Lys	Pro	Gln	Asp	Met
	450					455					460				
Phe	Val	Glu	Ser	Met	Phe	Ser	Leu	Ala	Asn	Lve	Asp	Glv	Asn	Glv	Tvr

Leu Ser Phe Arg Glu Phe Leu Asp Ile Leu Val Val Phe Met Lys Gly Ser Pro Glu Glu Lys Ser Arg Leu Met Phe Arg Met Tyr Asp Phe Asp Gly Asn Gly Leu Ile Ser Lys Asp Glu Phe Ile Arg Met Leu Arg Ser Phe Ile Glu Ile Ser Asn Asn Cys Leu Ser Lys Ala Gln Leu Ala Glu Val Val Glu Ser Met Phe Arg Glu Ser Gly Phe Gln Asp Lys Glu Glu Leu Thr Trp Glu Asp Phe His Phe Met Leu Arg Asp His Asn Ser Glu Leu Arg Phe Thr Gln Leu Cys Val Lys Gly Val Glu Val Pro Glu Val Ile Lys Asp Leu Cys Arg Arg Ala Ser Tyr Ile Ser Gln Asp Met Ile Cys Pro Ser Pro

<210> 3778

<211> 1093

<212> PRT

<213> Homo sapiens

<400> 3778

Met Leu Cys Lys Lys Lys Ile Pro Cys Ser Glu Glu Phe Leu Leu
1 5 10 15

Ser	Lys	Thr	Leu	Gly	Asp	Pro	Val	Lys	Ile	Arg	Ala	Trp	Asn	Ile	Ala
			20					25					30		
Gly	Leu	Pro	Thr	Asp	Thr	Phe	Ser	Ile	Asp	Asn	Gly	Val	Ile	Val	Asn
		35					40					45			
Asn	Cys	Arg	Arg	Trp	Pro	Leu	Met	Ile	Asp	Pro	Gln	Gly	Gln	Ala	Asn
	50					55					60				
Lys	Trp	Ile	Lys	Asn	Ser	Glu	Arg	Glu	Asn	Gln	Leu	Ser	Val	Ile	Lys
65					70					75					80
Leu	Ser	Asp	Ser	Asp	Tyr	Met	Arg	Thr	Leu	Glu	Asn	Cys	Ile	Gln	Phe
				85					90					95	
Gly	Thr	Pro	Leu	Leu	Leu	Glu	Asn	Val	Gly	Glu	Glu	Leu	Asp	Pro	Ser
			100					105			•		110		
Leu	Glu	Pro	Leu	Leu	Leu	Arg	Gln	Thr	Phe	Lys	Gln	Gly	Gly	Ile	Asp
		115					120					125			
Cys	Ile	Arg	Leu	Gly	Glu	Val	Ile	Ile	Glu	Tyr	Ser	Phe	Asp	Phe	Lys
	130					135					140				
Phe	Tyr	Ile	Thr	Thr	Lys	Leu	Arg	Asn	Pro	His	Tyr	Met	Pro	Glu	Leu
145					150					155					160
Ala	Thr	Lys	Val	Ser	Leu	Leu	Asn	Phe	Met	Ile	Thr	Pro	Glu	Gly	Leu
				165					170					175	
Glu	Asp	Gln	Leu	Leu	Gly	Ile	Val	Val	Ala	Lys	Glu	Arg	Pro	Glu	Leu
			180					185					190		
Glu	Glu	Glu	Arg	Asn	Ala	Leu	Ile	Leu	Gln	Ser	Ala	Ala	Asn	Lys	Lys
		195					200					205			
Gln	Leu	Lys	Asp	Ile	Glu	Lys	Lys	Ile	Leu	Glu	Thr	Leu	Ser	Ser	Ser
	210					215					220				
Glu	Gly	Asn	Ile	Leu	Glu	Asp	Glu	Ser	Ala	Ile	Lys	Val	Leu	Asp	Ser
225					230		•			235					240
Ala	Lvs	Met	Met	Ser	Asn	Glu	Ile	Thr	Lys	Lys	Gln	Gln	Ile	Ala	Glu

				245					250					255	
Lys	Thr	Glu	Leu	Lys	Ile	Ala	Glu	Ser	Arg	Glu	Gly	Tyr	Arg	Pro	Ile
			260					265					270		
Ala	Lys	His	Ser	Ser	Val	Leu	Phe	Phe	Ser	Ile	Ala	Asp	Leu	Ala	Asn
		275					280					285			
Ile	Asp	Pro	Met	Tyr	Gln	Tyr	Ser	Leu	Thr	Trp	Phe	Val	Asn	Leu	Tyr
	290					295					300				
Ile	Asn	Ser	Ile	His	Asp	Ser	Asn	Lys	Ser	Lys	Ile	Leu	Glu	Lys	Arg
305					310					315					320
Leu	Arg	Tyr	Leu	Asn	Asp	His	Phe	Thr	Tyr	Asn	Leu	Tyr	Cys	Asn	Ile
				325					330					335	
Cys	Arg	Ser	Leu	Phe	Glu	Lys	Asp	Lys	Leu	Leu	Phe	Ser	Phe	Leu	Leu
			340					345					350		
Cys	Ala	Asn	Leu	Leu	Leu	Ala	Arg	Lys	Glu	Ile	Glu	Tyr	Gln	Glu	Leu
		355					360					365			
Met	Phe	Leu	Leu	Thr	Gly	Gly	Val	Ser	Leu	Lys	Ser	Ala	Glu	Lys	Asn
	370					375					380				
Pro	Asp	Pro	Thr	Trp	Leu	Gln	Asp	Lys	Ser	Trp	Glu	Glu	Ile	Cys	Arg
385					390					395					400
Ala	Ser	Glu	Phe	Pro	Ala	Phe	Arg	Gly	Leu	Arg	Gln	His	Phe	Cys	Glu
				405					410					415	
His	Ile	Tyr	Glu	Trp	Arg	Glu	Ile	Tyr	Asp	Ser	Lys	Glu	Pro	His	Asn
			420					425					430		
Ala	Lys	Phe	Pro	Ala	Pro	Met	Asp	Lys	Asn	Leu	Asn	Glu	Leu	Gln	Lys
		435					440					445			
Ile	Ile	Ile	Leu	Arg	Cys	Leu	Arg	Pro	Asp	Lys	Ile	Thr	Pro	Ala	Ile
	450					455					460				
Thr	Asn	Tyr	Val	Thr	Asp	Lys	Leu	Gly	Lys	Lys	Phe	Val	Glu	Pro	Pro
465					470					475					480

Pro	Phe	Asp	Leu	Thr	Lys	Ser	Tyr	Leu	Asp	Ser	Asn	Cys	Thr	Ile	Pro
				485					490					495	
Leu	Ile	Phe	Val	Leu	Ser	Pro	Gly	Ala	Asp	Pro	Met	Ala	Ser	Leu	Leu
			500					505					510		
Lys	Phe	Ala	Asn	Asp	Lys	Ser	Met	Ser	Gly	Asn	Lys	Phe	Gln	Ala	Ile
		515					520					525			
Ser	Leu	Gly	Gln	Gly	Gln	Gly	Pro	Ile	Ala	Ala	Lys	Met	Ile	Lys	Ala
	530					535					540				
Ala	Ile	Glu	Glu	Gly	Thr	Trp	Val	Cys	Leu	Gln	Asn	Cys	His	Leu	Ala
545					550					555					560
Val	Ser	Trp	Met	Pro	Met	Leu	Glu	Lys	Ile	Cys	Glu	Asp	Phe	Thr	Ser
				565					570					575	
Glu	Thr	Cys	Asn	Ser	Ser	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Tyr	Pro	Ser
			580					585					590		
Ser	Lys	Phe	Pro	Val	Thr	Ile	Leu	Gln	Asn	Gly	Val	Lys	Met	Thr	Asn
		595					600					605			
Glu	Pro	Pro	Thr	Gly	Leu	Arg	Leu	Asn	Leu	Leu	Gln	Ser	Tyr	Leu	Thr
	610					615					620				
Asp	Pro	Val	Ser	Asp	Pro	Glu	Phe	Phe	Lys	Gly	Cys	Arg	Gly	Lys	Glu
625					630					635					640
Leu	Ala	Trp	Glu	Lys	Leu	Leu	Phe	Gly	Val	Cys	Phe	Phe	His	Ala	Leu
				645					650					655	
Val	Gln	Glu	Arg	Lys	Lys	Phe	Gly	Pro	Leu	Gly	Trp	Asn	Ile	Pro	Tyr
			660					665					670		
Gly	Phe	Asn	Glu	Ser	Asp	Leu	Arg	Ile	Ser	Ile	Arg	Gln	Leu	Gln	Leu
		675					680					685			
Phe	Ile	Asn	Glu	Tyr	Asp	Thr	Ile	Pro	Phe	Glu	Ala	Ile	Ser	Tyr	Leu
	690					695					700				
Thr	Glv	Glu	Cvs	Asn	Tvr	Glv	Glv	Arg	Val	Thr	Asp	Asp	Trp	Asp	Arg

705					710					715					720
Arg	Leu	Leu	Leu	Thr	Met	Leu	Ala	Asp	Phe	Tyr	Asn	Leu	Tyr	Ile	Val
				725					730					735	
Glu	Asn	Pro	His	Tyr	Lys	Phe	Ser	Pro	Ser	Gly	Asn	Tyr	Phe	Ala	Pro
			740					745					750		
Pro	Lys	Gly	Thr	Tyr	Glu	Asp	Tyr	Ile	Glu	Phe	Ile	Lys	Lys	Leu	Pro
		755					760					765			
Phe	Thr	Gln	His	Pro	Glu	Ile	Phe	Gly	Leu	His	Glu	Asn	Val	Asp	Ile
	770					775					780				
Ser	Lys	Asp	Leu	Gln	Gln	Thr	Lys	Thr	Leu	Phe	Glu	Ser	Leu	Leu	Leu
785					790					795	•				800
Thr	Gln	Gly	Gly	Ser	Lys	Gln	Thr	Gly	Ala	Ser	Gly	Ser	Thr	Asp	Gln
				805					810					815	
Ile	Leu	Leu	Glu	Ile	Thr	Lys	Asp	Ile	Leu	Asn	Lys	Leu	Pro	Ser	Asp
			820		•			825					830		
Phe	Asp	Ile	Glu	Met	Ala	Leu	Arg	Lys	Tyr	Pro	Val	Arg	Tyr	Glu	Glu
		835					840					845			
Ser	Met	Asn	Thr	Val	Leu	Val	Gln	Glu	Met	Glu	Arg	Phe	Asn	Asn	Leu
	850					855					860				
Ile	Ile	Thr	Ile	Arg	Asn	Thr	Leu	Arg	Asp	Leu	Glu	Lys	Ala	Ile	Lys
865					870					875					880
Gly	Val	Val	Val	Met	Asp	Ser	Ala	Leu	Glu	Ala	Leu	Ser	Gly	Ser	Leu
				885					890					895	
Leu	Val	Gly	Lys	Val	Pro	Glu	Ile	Trp	Ala	Lys	Arg	Ser	Tyr	Pro	Ser
			900					905					910		
Leu	Lys	Pro	Leu	Gly	Ser	Tyr	Ile	Thr	Asp	Phe	Leu	Ala	Arg	Leu	Asn
		915					920					925			
Phe	Leu	Gln	Asp	Trp	Tyr	Asn	Ser	Gly	Lys	Pro	Cys	Val	Phe	Trp	Leu
	930					935					940				

Ser Gly Phe Phe Phe Thr Gln Ala Phe Leu Thr Gly Ala Met Gln Asn 945 950 955 960

Tyr Ala Arg Lys Tyr Thr Thr Pro Ile Asp Leu Leu Gly Tyr Glu Phe
965 970 975

Glu Val Ile Pro Ser Asp Thr Ser Asp Thr Ser Pro Glu Asp Gly Val 980 985 990

Tyr Ile His Gly Leu Tyr Leu Asp Gly Ala Arg Trp Asp Arg Glu Ser 995 1000 1005

Gly Leu Leu Ala Glu Gln Tyr Pro Lys Leu Leu Phe Asp Leu Met Pro 1010 1015 1020

Ile Ile Trp Ile Lys Pro Thr Gln Lys Ser Arg Ile Ile Lys Ser Asp 1025 1030 1035 1040

Ala Tyr Val Cys Pro Leu Tyr Lys Thr Ser Glu Arg Lys Gly Thr Leu 1045 1050 1055

Ser Thr Thr Gly His Ser Thr Asn Phe Val IIe Ala Met Leu Leu Lys 1060 1065 1070

Thr Asp Gln Pro Thr Arg His Trp Ile Lys Arg Gly Val Ala Leu Leu 1075 1080 1085

Cys Gln Leu Asp Asp

<210> 3779

1090

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3779

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<210> 3780

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3780

Met Phe Ser Pro Val Ile Cys Cys Pro Leu Ser Ser Glu Arg Asp Ser

1 5 10 15

Leu Lys Ile Leu Ser Gln Met Gly Ser Glu Phe Ser Ser Gly Phe Ser
20 25 30

Ser His Cys Leu Ile Ala Cys Thr Asp Leu Ala Leu Cys Cys Pro Ala 35 40 45 Cys Asp Leu Phe Ser His His Cys Pro Ser Leu Ser Leu Phe Cys Ser Val Asp Leu Leu Tyr Tyr Ile Val Cys Thr His Thr Arg His Tyr Phe Phe Leu Cys Leu Pro Ser Ser Val Thr Cys Ile His Leu Leu Pro Leu Ile Cys Lys Phe Leu Glu Gly Arg Asn Phe Val Leu Phe Thr Ala Val Leu Leu Thr Leu Arg Thr Ile Met Thr His Ser Arg Arg Ser Asn Ile Phe Glu <210> 3781 <211> 167 <212> PRT <213> Homo sapiens <400> 3781 Met Ser Ser Pro Val Ser Ala Pro Pro His Ala Gly His Ser Trp Val Pro Gly His Trp Ser Val Leu Phe His Phe Arg Lys Arg Ala Ile Lys Tyr Arg Gly Asp Lys Gly Val Leu Thr Pro Ser Tyr Arg His Val Asp

Arg Leu Val Gln Ala Leu Gly Ser Gly Cys Ser Pro Lys Lys Ser Leu

Ser Tyr Arg Asn Lys Glu Val Gly Val Asp Val Cys Ala Val Pro Pro

Glu His Arg Ala Phe Leu His Pro Glu Arg Asn Glu Asn Phe Pro Phe Ser His Arg His Pro His Gly Leu Ala Ile Leu Asp Ser Cys Arg His Arg Asp His His Ser Leu Phe Leu Leu Gly Leu Ser Cys Ser Pro Ala Asp His Thr Gly Arg Tyr Asp Asp Gly Ala Ala Ala Thr Thr Ser Pro Thr Arg Gly Thr His His Lys Arg Ala Cys Val Asp Gly Phe Leu Ile Lys Thr Arg Lys Met Val Thr <210> 3782 <211> 972 <212> PRT <213> Homo sapiens

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Leu	Met	Val	Cys	Arg	Gln	Leu	Asn	Met	Glu	Glu	Ser	Val	Ala	Glu	Ile
65					70					75					80
Met	Asn	Gln	Leu	Gly	Ala	Asp	Glu	Asn	Gly	Lys	Ile	Ser	Phe	Gln	Asp
				85					90					95	
Phe	Thr	Arg	Cys	Arg	Met	Gln	Leu	Val	Arg	Glu	Ile	Arg	Lys	Glu	Glu
			100					105					110		
Val	Asp	Leu	Ser	Ala	Lys	Ser	Asp	Asn	Ser	Cys	Thr	Lys	Lys	Leu	Arg
		115					120					125			
Asp	Arg	Ile	Ala	Ser	Trp	Pro	Thr	Ser	Ser	Asp	Asn	Ser	Leu	Gly	Ala
	130					135					140				
Leu	Ser	Ala	Ala	Arg	Glu	Ser	Trp	Glu	Tyr	Asp	Ser	Gly	Ala	Arg	Asp
145					150					155					160
Leu	Gln	Ser	Pro	Asp	Val	Gln	Ser	Gln	Ser	Ala	Leu	Gln	Lys	Leu	Leu
				165					170					175	
Glu	Tyr	Gly	Gly	Ser	Ser	Leu	His	Gln	Gln	Ala	Ala	Leu	His	Lys	Leu
			180					185					190		
Leu	Thr	Gln	Ser	Pro	His	Ile	Gly	Asn	Ser	Val	Gly	Gly	Ser	Tyr	Leu
		195					200					205			
Glu	Leu	Ala	Asn	Thr	Leu	His	Ser	Ala	Ala	Leu	Ala	Ser	Leu	Lys	Gly
	210					215					220				
Asp	Ile	Val	Glu	Leu	Asn	Lys	Arg	Leu	Gln	Gln	Thr	Glu	Arg	Glu	Arg
225					230					235					240
Asp	Leu	Leu	Glu	Lys	Lys	Leu	Ala	Lys	Ala	Gln	Cys	Glu	Gln	Ser	His
				245					250					255	
Leu	Met	Arg	Glu	His	Glu	Asp	Val	Gln	Glu	Arg	Thr	Thr	Leu	Arg	Tyr
			260					265					270		
Glu	Glu	Arg	Ile	Thr	Glu	Leu	His	Ser	Val	Ile	Ala	Glu	Leu	Asn	Lys
		275					280					285			
Lys	Ile	Asp	Arg	Leu	Gln	Gly	Thr	Thr	Ile	Arg	Glu	Glu	Asp	Glu	Tyr

	290					295					300				
Ser	Glu	Leu	Arg	Ser	Glu	Leu	Ser	Gln	Ser	Gln	His	Glu	Val	Asn	Glu
305					310					315					320
Asp	Ser	Arg	Ser	Met	Asp	Gln	Asp	Gln	Thr	Ser	Val	Ser	Ile	Pro	Glu
				325					330					335	
Asn	Gln	Ser	Thr	Met	Val	Thr	Ala	Asp	Met	Asp	Asn	Cys	Ser	Asp	Leu
			340					345					350		
Asn	Ser	Glu	Leu	Gln	Arg	Val	Leu	Thr	Gly	Leu	Glu	Asn	Val	Val	Cys
		355					360					365			
Gly	Arg	Lys	Lys	Ser	Ser	Cys	Ser	Leu	Ser	Val	Ala	Glu	Val	Asp	Arg
	370					375					380				
His	Ile	Glu	Gln	Leu	Thr	Thr	Ala	Ser	Glu	His	Cys	Asp	Leu	Ala	Ile
385					390					395					400
Lys	Thr	Val	Glu	Glu	Ile	Glu	Gly	Val	Leu	Gly	Arg	Asp	Leu	Tyr	Pro
				405					410					415	
Asn	Leu	Ala	Glu	Glu	Arg	Ser	Arg	Trp	Glu	Lys	Glu	Leu	Ala	Gly	Leu
			420					425					430		
Arg	Glu	Glu	Asn	Glu	Ser	Leu	Thr	Ala	Met	Leu	Cys	Ser	Lys	Glu	Glu
		435					440					445			
Glu	Leu	Asn	Arg	Thr	Lys	Ala	Thr	Met	Asn	Ala	Ile	Arg	Glu	Glu	Arg
	450					455					460				
Asp	Arg	Leu	Arg	Arg	Arg	Val	Arg	Glu	Leu	Gln	Thr	Arg	Leu	Gln	Ser
465					470					475					480
Val	Gln	Ala	Thr	Gly	Pro	Ser	Ser	Pro	Gly	Arg	Leu	Thr	Ser	Thr	Asn
				485					490					495	
Arg	Pro	Ile	Asn	Pro	Ser	Thr	Gly	Glu	Leu	Ser	Thr	Ser	Ser	Ser	Ser
			500					505					510		
Asn	Asp	Ile	Pro	Ile	Ala	Lys	Ile	Ala	Glu	Arg	Val	Lys	Leu	Ser	Lys
		515					520					525			

Thr	Arg	Ser	Glu	Ser	Ser	Ser	Ser	Asp	Arg	Pro	Val	Leu	Gly	Ser	Glu
	530					535					540				
Ile	Ser	Gly	Ile	Gly	Val	Ser	Ser	Ser	Val	Ala	Glu	His	Leu	Ala	His
545					550					555					560
Ser	Leu	Gln	Asp	Cys	Ser	Asn	Ile	Gln	Glu	Ile	Phe	Gln	Thr	Leu	Tyr
				565					570					575	
Ser	His	Gly	Ser	Ala	Ile	Ser	Glu	Ser	Lys	Ile	Arg	Glu	Phe	Glu	Val
			580					585					590		
Glu	Thr	Glu	Arg	Leu	Asn	Ser	Arg	Ile	Glu	His	Leu	Lys	Ser	Gln	Asn
		595					600					605			
Asp	Leu	Leu	Thr	Ile	Thr	Leu	Glu	Glu	Cys	Lys	Ser	Asn	Ala	Glu	Arg
	610					615					620				
Met	Ser	Met	Leu	Val	Gly	Lys	Tyr	Glu	Ser	Asn	Ala	Thr	Ala	Leu	Arg
625					630					635					640
Leu	Ala	Leu	Gln	Tyr	Ser	Glu	Gln	Cys	Ile	Glu	Ala	Tyr	Glu	Leu	Leu
				645					650					655	
Leu	Ala	Leu	Ala	Glu	Ser	Glu	Gln	Ser	Leu	Ile	Leu	Gly	Gln	Phe	Arg
			660					665					670		
Ala	Ala	Gly	Val	Gly	Ser	Ser	Pro	Gly	Asp	Gln	Ser	Gly	Asp	Glu	Asn
		675					680					685			
Ile	Thr	Gln	Met	Leu	Lys	Arg	Ala	His	Asp	Cys	Arg	Lys	Thr	Ala	Glu
	690					695					700				
Asn	Ala	Ala	Lys	Ala	Leu	Leu	Met	Lys	Leu	Asp	Gly	Ser	Cys	Gly	Gly
705					710	•			•	715					720
Ala	Phe	Ala	Val	Ala	Gly	Cys	Ser	Val	Gln	Pro	Trp	Glu	Ser	Leu	Ser
				725					730					735	
Ser	Asn	Ser	His	Thr	Ser	Thr	Thr	Ser	Ser	Thr	Ala	Ser	Ser	Cys	Asp
			740					745					750		
Thr	Glu	Phe	Thr	Lys	Glu	Asp	Glu	Gln	Arg	Leu	Lys	Asp	Tyr	Ile	Gln

		755					760					765			
Gln	Leu	Lys	Asn	Asp	Arg	Ala	Ala	Val	Lys	Leu	Thr	Met	Leu	Glu	Leu
	770					775					780				
Glu	Ser	Ile	His	Ile	Asp	Pro	Leu	Ser	Tyr	Asp	Val	Lys	Pro	Arg	Gly
785					790					795					800
Asp	Ser	Gln	Arg	Leu	Asp	Leu	Glu	Asn	Ala	Val	Leu	Met	Gln	Glu	Leu
				805					810					815	
Met	Ala	Met	Lys	Glu	Glu	Met	Ala	Glu	Leu	Lys	Ala	Gln	Leu	Tyr	Leu
			820					825					830		
Leu	Glu	Lys	Glu	Lys	Lys	Ala	Leu	Glu	Leu	Lys	Leu	Ser	Thr	Arg	Glu
		835					840					845			
Ala	Gln	Glu	Gln	Ala	Tyr	Leu	Val	His	Ile	Glu	His	Leu	Lys	Ser	Glu
	850					855					860				
Val	Glu	Glu	Gln	Lys	Glu	Gln	Arg	Met	Arg	Ser	Leu	Ser	Ser	Thr	
865					870					875					880
Ser	Gly	Ser	Lys	Asp	Lys	Pro	Gly	Lys		Cys	Ala	Asp	Ala		Ser
				885					890					895	
Pro	Ala	Leu		Leu	Ala	Glu	Leu		Thr	Thr	Cys	Ser	Glu	Asn	Glu
			900					905				_	910	_	_
Leu	Ala		Glu	Phe	Thr	Asn		Ile	Arg	Arg	Glu		Lys	Leu	Lys
		915			_		920		_	~ .		925			
Ala		Val	Gln	Glu	Leu		Ser	Ala	Leu	Glu		Leu	Thr	Lys	Ser
	930					935	_				940	_			
	Glu	He	Arg	His		Gln	Ser	Ala	Glu		Val	Asn	Asp	Leu	
945					950					955	-				960
Arg	Ala	Asn	Ser		Leu	Val	Ala	Ala		Glu	Lys				
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<210> 3783

<211> 570

<212> PRT

<213> Homo sapiens

<400> 3783

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Asp Ala Glu Leu Gln Ile Glu Arg Arg Phe Val Pro Asp Glu Cys Pro
35 40 45

Arg Thr Val Arg Ser Gly Asp Phe Val Arg Tyr His Tyr Val Gly Thr
50 55 60

Phe Pro Asp Gly Gln Lys Phe Asp Ser Ser Tyr Asp Arg Asp Ser Thr
65 70 75 80

Phe Asn Val Phe Val Gly Lys Gly Gln Leu Ile Thr Gly Met Asp Gln
85 90 95

Ala Leu Val Gly Met Cys Val Asn Glu Arg Arg Phe Val Lys Ile Pro 100 105 110

Pro Lys Leu Ala Tyr Gly Asn Glu Gly Val Ser Gly Val Ile Pro Pro
115 120 125

Asn Ser Val Leu His Phe Asp Val Leu Leu Met Asp Ile Trp Asn Ser 130 135 140

Glu Asp Gln Val Gln Ile His Thr Tyr Phe Lys Pro Pro Ser Cys Pro 145 150 155 160

Arg Thr Ile Gln Val Ser Asp Phe Val Arg Tyr His Tyr Asn Gly Thr
165 170 175

Phe Leu Asp Gly Thr Leu Phe Asp Ser Ser His Asn Arg Met Lys Thr

			180					185					190		
Tyr	Asp	Thr	Tyr	Val	Gly	Ile	Gly	Trp	Leu	Ile	Pro	Gly	Met	Asp	Lys
		195					200					205			
Gly	Leu	Leu	Gly	Met	Cys	Val	Gly	Glu	Lys	Arg	Ile	Ile	Thr	Ile	Pro
	210					215					220				
Pro	Phe	Leu	Ala	Tyr	Gly	Glu	Asp	Gly	Asp	Gly	Lys	Asp	Ile	Pro	Gly
225					230					235					240
Gln	Ala	Ser	Leu	Val	Phe	Asp	Val	Ala	Leu	Leu	Asp	Leu	His	Asn	Pro
				245					250					255	
Lys	Asp	Ser	Ile	Ser	Ile	Glu	Asn	Lys	Val	Val	Pro	Glu	Asn	Cys	Glu
			260					265					270		
Arg	Ile	Ser	Gln	Ser	Gly	Asp	Phe	Leu	Arg	Tyr	His	Tyr	Asn	Gly	Thr
		275					280					285			
Leu	Leu	Asp	Gly	Thr	Leu	Phe	Asp	Ser	Ser	Tyr	Ser	Arg	Asn	Arg	Thr
	290					295					300				
Phe	Asp	Thr	Tyr	Ile	Gly	Gln	Gly	Tyr	Val	Ile	Pro	Gly	Met	Asp	Glu
305					310					315					320
Gly	Leu	Leu	Gly	Val	Cys	Ile	Gly	Glu	Lys	Arg	Arg	Ile	Val	Val	Pro
				325					330					335	
Pro	His	Leu	Gly	Tyr	Gly	Glu	Glu	Gly	Arg	Gly	Asn	Ile	Pro	Gly	Ser
			340					345					350		
Ala	Val	Leu	Val	Phe	Asp	Ile	His	Val	Ile	Asp	Phe	His	Asn	Pro	Ser
		355					360					365			
Asp	Ser	Ile	Ser	Ile	Thr	Ser	His	Tyr	Lys	Pro	Pro	Asp	Cys	Ser	Val
	370					375					380				
Leu	Ser	Lys	Lys	Gly	Asp	Tyr	Leu	Lys	Tyr	His	Tyr	Asn	Ala	Ser	Leu
385					390					395					400
Leu	Asp	Gly	Thr	Leu	Leu	Asp	Ser	Thr	Trp	Asn	Leu	Gly	Lys	Thr	Tyr
				405					410					415	

Asn Ile Val Leu Gly Ser Gly Gln Val Val Leu Gly Met Asp Met Gly Leu Arg Glu Met Cys Val Gly Glu Lys Arg Thr Val Ile Ile Pro Pro His Leu Gly Tyr Gly Glu Ala Gly Val Asp Gly Glu Val Pro Gly Ser Ala Val Leu Val Phe Asp Ile Glu Leu Leu Glu Leu Val Ala Gly Leu Pro Glu Gly Tyr Met Phe Ile Trp Asn Gly Glu Val Ser Pro Asn Leu Phe Glu Glu Ile Asp Lys Asp Gly Asn Gly Glu Val Leu Leu Glu Glu Phe Ser Glu Tyr Ile His Ala Gln Val Ala Ser Gly Lys Gly Lys Leu Ala Pro Gly Phe Asp Ala Glu Leu Ile Val Lys Asn Met Phe Thr Asn Gln Asp Arg Asn Gly Asp Gly Lys Val Thr Ala Glu Glu Phe Lys Leu Lys Asp Gln Glu Ala Lys His Asp Glu Leu

<210> 3784

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3784

Met Pro Cys Arg Leu Leu His Gln Arg Glu Thr Arg Ser Gly Gly Pro

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			20					25					30		
Pro	Thr	Leu	Gln	Ser	Trp	Glu	Glu	Ser	His	Ala	Pro	Ser	Arg	Asp	Pro
		35					40					45			
Arg	Asp	His	Gln	Gly	Ser	Val	Glu	Asp	Thr	Ser	Leu	Gly	Gly	Asp	Ala
	50					55					60				
Pro	Ala	Asp	Gly	Val	Ser	Pro	Ser	Val	Pro	Pro	Leu	Gln	Gly	Leu	Gly
65					70					75					80
Lys	Ala	Ala	Gly	Pro	Gly	Gly	Thr	Gly	Gln	Ala	Glu	Cys	Gln	Val	Val
				85					90					95	
Val	Ala	Thr	His	Arg	Ala	Asn	Leu	Lys	Pro	Trp	Asp	Gly	Arg	Ala	Ala
			100					105					110		
Pro	Leu	Gly	Lys	Arg	Thr	Glu	Glu	Gly	Arg	Leu	Ser	Thr	Ser	Ser	Cys
		115					120					125			
Ala	Ser	Val	Ser	Arg	Asn	Lys	Pro	Asp	Ser	Val	Pro	Gln	Gly	Asp	Pro
	130					135					140				
Val	Trp	Pro	Pro	Glu	Ser	Thr	Gly	Pro	Ala	Leu	Cys	Ala	Gly	Glu	Glu
145					150					155					160
Thr	Glu	Pro	Gln	Ser	Ser	Glu	Gly	Leu	Ala	Trp	Gly	Pro	Trp	Ala	Gln
				165					170					175	
Pro	Trp	Ala	Pro	Ser	Leu	Cys	Pro	Ser	Gln	Thr	Gly	Thr	Ala	Ser	Thr
			180					185					190		
Ala	Ser	Pro	Gln	Arg	Ala	Ser	Arg	Leu	Ala	Leu	Gln	Gly	Pro	Pro	Gly
		195					200					205			
Thr	Ile	Leu	Ser	Leu	Ser	Ser	Ser	Ser	Pro	Cys	Leu	Pro	Pro	Ser	His
	210					215					220				
Cys	Asp	Pro	Gly	Ala	Ala	Ser	Ser	Trp	Ala	Gly	Leu	Gln	Ser	Leu	Lys
225					230					235					240

300

295

<210> 3785

290

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3785

Met Leu Phe Ser Asn Tyr Ala Phe Asn Gly Ile Leu Phe Tyr Phe Phe

1 5 10 15

Ile Phe Asn Ser Phe Phe Ile Ser Leu Gly Ile Leu Lys Leu Tyr Leu 20 25 30

Ile Leu Phe Phe Leu Ser Arg Val Glu Asn Ser Cys Phe Lys Ser Pro 35 40 45

Gln Asn Lys Ile Pro Phe Pro Asp Ile Val Glu Arg Thr Gly Ala Trp
50 55 60

Met Phe Gly Trp Gln Gly Lys Gly Lys Ser Pro Gly Ala Thr Asp Arg 65 70 75 80

Asn Ile Gln Pro Asn Pro Pro Val Phe Asp Ser Thr Thr His Cys Gly
85 90 95

Ala Phe Leu Lys Thr Leu Glu Leu Gln Val Ser Glu Glu Tyr Phe Arg

100 105 110

Gln

<210> 3786

<211> 792

<212> PRT

<213> Homo sapiens

<400> 3786

Met Arg Leu Val Asn Glu Met Tyr Gln Thr Ser Leu Arg Gln Phe Leu

1 5 10 15

Gly Leu Phe Asp Leu Ser Leu Ala Arg Ser Val Lys Ser Pro Ile Thr

20 25 30

Ser Lys Arg Ile Ala Asn Ile Ile Glu His Met Thr Tyr Glu Val Tyr

35 40 45

Lys Tyr Ala Ala Arg Gly Leu Tyr Glu Glu His Lys Phe Leu Phe Thr

50 55 60

Leu Leu Leu Thr Leu Lys Ile Asp Ile Gln Arg Asn Arg Val Lys His

65 70 75 80

Glu Glu Phe Leu Thr Leu Ile Lys Gly Gly Ala Ser Leu Asp Leu Lys

85 90 95

Ala Cys Pro Pro Lys Pro Ser Lys Trp Ile Leu Asp Ile Thr Trp Leu

100 105 110

Asn Leu Val Glu Leu Ser Lys Leu Arg Gln Phe Ser Asp Val Leu Asp

115 120 125

Gln Ile Ser Arg Asn Glu Lys Met Trp Lys Ile Trp Phe Asp Lys Glu

130 135 140

Asn	Pro	Glu	Glu	Glu	Pro	Leu	Pro	Asn	Ala	Tyr	Asp	Lys	Ser	Leu	Asp
145					150					155					160
Cys	Phe	Arg	Arg	Leu	Leu	Leu	Ile	Arg	Ser	Trp	Cys	Pro	Asp	Arg	Thr
				165					170					175	
Ile	Ala	Gln	Ala	Arg	Lys	Tyr	Ile	Val	Asp	Ser	Met	Gly	Glu	Lys	Tyr
			180					185					190		
Ala	Glu	Gly	Val	Ile	Leu	Asp	Leu	Glu	Lys	Thr	Trp	Glu	Glu	Ser	Asp
		195					200					205			
Pro	Arg	Thr	Pro	Leu	Ile	Cys	Leu	Leu	Ser	Met	Gly	Ser	Asp	Pro	Thi
	210					215					220				
Asp	Ser	Ile	Ile	Ala	Leu	Gly	Lys	Arg	Leu	Lys	Ile	Glu	Thr	Arg	Туг
225					230					235					240
Val	Ser	Met	Gly	Gln	Gly	Gln	Glu	Val	His	Ala	Arg	Lys	Leu	Leu	Glr
				245					250					255	
Gln	Thr	Met	Ala	Asn	Gly	Gly	Trp	Ala	Leu	Leu	Gln	Asn	Cys	His	Leu
			260					265					270		
Gly	Leu	Asp	Phe	Met	Asp	Glu	Leu	Met	Asp	Ile	Ile	Ile	Glu	Thr	Glu
		275					280					285			
Leu	Val	His	Asp	Ala	Phe	Arg	Leu	Trp	Met	Thr	Thr	Glu	Val	His	Lys
	290					295					300				
Gln	Phe	Pro	Ile	Thr	Leu	Leu	Gln	Met	Ser	Ile	Lys	Phe	Ala	Asn	Asp
305					310					315					320
Pro	Pro	Gln	Gly	Leu	Arg	Ala	Gly	Leu	Lys	Arg	Thr	Tyr	Ser	Gly	Val
				325					330					335	
Ser	Gln	Asp	Leu	Leu	Asp	Val	Ser	Ser	Gly	Ser	Gln	Trp	Lys	Pro	Met
			340					345					350		
Leu	Tyr	Ala	Val	Ala	Phe	Leu	His	Ser	Thr	Val	Gln	Glu	Arg	Arg	Lys
		355					360					365			
Phe	Glv	Ala	Len	Glaz	Trn	Aen	Tle	Pro	Tur	Glu	Phe	Asn	Gln	Ala	Acr

	370					375					380				
Phe	Asn	Ala	Thr	Val	Gln	Phe	Ile	Gln	Asn	His	Leu	Asp	Asp	Met	Asp
385					390					395					400
Val	Lys	Lys	Gly	Val	Ser	Trp	Thr	Thr	Ile	Arg	Tyr	Met	Ile	Gly	Glu
				405					410					415	
Ile	Gln	Tyr	Gly	Gly	Arg	Val	Thr	Asp	Asp	Tyr	Asp	Lys	Arg	Leu	Leu
			420					425					430		
Asn	Thr	Phe	Ala	Lys	Val	Trp	Phe	Ser	Glu	Asn	Met	Phe	Gly	Pro	Asp
		435					440					445			
Phe	Ser	Phe	Tyr	Gln	Gly	Tyr	Asn	Ile	Pro	Lys	Cys	Ser	Thr	Val	Asp
	450					455					460				
Asn	Tyr	Leu	Gln	Tyr	Ile	Gln	Ser	Leu	Pro	Ala	Tyr	Asp	Ser	Pro	Glu
465					470					475					480
Val	Phe	Gly	Leu	His	Pro	Asn	Ala	Asp	Ile	Thr	Tyr	Gln	Ser	Lys	Leu
				485					490					495	
Ala	Lys	Asp	Val	Leu	Asp	Thr	Ile	Leu	Gly	Ile	Gln	Pro	Lys	Asp	Thr
			500					505					510		
Ser	Gly	Gly	Gly	Asp	Glu	Thr	Arg	Glu	Ala	Val	Val	Ala	Arg	Leu	Ala
		515					520					525			
Asp	Asp	Met	Leu	Glu	Lys	Leu	Pro	Pro	Asp	Tyr	Val	Pro	Phe	Glu	Val
	530					535					540				
Lys	Glu	Arg	Leu	Gln	Lys	Met	Gly	Pro	Phe	Gln	Pro	Met	Asn	Ile	Phe
545					550					555					560
Leu	Arg	Gln	Glu	Ile	Asp	Arg	Met	Gln	Arg	Val	Leu	Ser	Leu	Val	Arg
				565					570					575	
Ser	Thr	Leu	Thr	Glu	Leu	Lys	Leu	Ala	Ile	Asp	Gly	Thr	Ile	Ile	Met
			580					585					590		
Ser	Glu	Asn	Leu	Arg	Asp	Ala	Leu	Asp	Cys	Met	Phe	Asp	Ala	Arg	Ιlϵ
		595					600					605			

Pro Ala Trp Trp Lys Lys Ala Ser Trp Ile Ser Ser Thr Leu Gly Phe Trp Phe Thr Glu Leu Ile Glu Arg Asn Ser Gln Phe Thr Ser Trp Val Phe Asn Gly Arg Pro His Cys Phe Trp Met Thr Gly Phe Phe Asn Pro Gln Gly Phe Leu Thr Ala Met Arg Gln Glu Ile Thr Arg Ala Asn Lys Gly Trp Ala Leu Asp Asn Met Val Leu Cys Asn Glu Val Thr Lys Trp Met Lys Asp Asp Ile Ser Ala Pro Pro Thr Glu Gly Val Tyr Val Tyr Gly Leu Tyr Leu Glu Gly Ala Gly Trp Asp Lys Arg Asn Met Lys Leu Ile Glu Ser Lys Pro Lys Val Leu Phe Glu Leu Met Pro Val Ile Arg Ile Tyr Ala Glu Asn Asn Thr Leu Arg Asp Pro Arg Phe Tyr Ser Cys Pro Ile Tyr Lys Lys Pro Val Arg Thr Asp Leu Asn Tyr Ile Ala Ala Val Asp Leu Arg Thr Ala Gln Thr Pro Glu His Trp Val Leu Arg Gly Val Ala Leu Leu Cys Asp Val Lys

<210> 3787

<211> 230

<212> PRT

<213> Homo sapiens

1	<00	3787
\T	$\cup \cup -$	0101

Met Glu Gly Gly Pro Ala Val Cys Cys Gln Asp Pro Arg Ala Glu Leu 1 5 10 15

Val Glu Arg Val Ala Ala Ile Asp Val Thr His Leu Glu Glu Ala Asp 20 25 30

Gly Gly Pro Glu Pro Thr Arg Asn Gly Val Asp Pro Pro Pro Arg Ala
35 40 45

Arg Ala Ala Ser Val Ile Pro Gly Ser Thr Ser Arg Leu Leu Pro Ala 50 55 60

Arg Pro Ser Leu Ser Ala Arg Lys Leu Ser Leu Gln Glu Arg Pro Ala 65 70 75 80

Gly Ser Tyr Leu Glu Ala Gln Ala Gly Pro Tyr Ala Thr Gly Pro Ala 85 90 95

Ser His Ile Ser Pro Arg Ala Trp Arg Arg Pro Thr Ile Glu Ser His 100 105 110

His Val Ala Ile Ser Asp Ala Glu Asp Cys Val Gln Leu Asn Gln Tyr 115 120 125

Lys Leu Gln Ser Glu Ile Gly Lys Gly Ala Tyr Gly Val Val Arg Leu 130 135 140

Ala Tyr Asn Glu Ser Glu Asp Arg His Tyr Ala Met Lys Val Leu Ser 145 150 155 160

Lys Lys Leu Leu Lys Gln Tyr Gly Phe Pro Arg Arg Pro Pro Pro 165 170 175

Arg Gly Ser Gln Ala Ala Gln Gly Gly Pro Ala Lys Gln Leu Leu Pro 180 185 190

Leu Glu Arg Val Tyr Gln Glu Ile Ala Ile Leu Lys Lys Leu Asp His
195 200 205

Val Asn Val Val Lys Leu Ile Glu Val Leu Asp Asp Pro Ala Glu Asp 210 215 220

Asn Leu Tyr Leu Gly Glu

225 230

<210> 3788

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3788

Met Phe Tyr Pro Ile Ile Met Ala Met Pro Ile Gln Lys Ala Lys Gln
1 5 10 15

Asn Leu Phe Gly Gln Asn Arg Asn Phe Ser Asn Gly His Val Val Cys
20 25 30

Glu Lys Lys Gln Gln Leu Glu Leu Asp Ser Ile Val Glu Glu Thr Ile 35 40 45

Thr Gly Asp Tyr Ala Leu Ile Ile Asn Gly His Ser Leu Ala His Ala
50 55 60

Leu Glu Ser Asp Val Lys Asn Asp Leu Leu Glu Leu Ala Cys Met Cys 65 70 75 80

Lys Thr Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val 85 90 95

Val Glu Leu Val Lys Lys Tyr Arg Asn Ala Val Thr Leu Ala Ile Gly
100 105 110

Asp Gly Ala Asn Asp Val Ser Met Ile Lys Ser Ala His Ile Gly Val 115 120 125

Gly Ile Ser Gly Gln Glu Gly Leu Gln Ala Val Leu Ala Ser Asp Tyr

130 135 140 Ser Phe Ala Gln Phe Arg Tyr Leu Gln Arg Leu Leu Leu Val His Gly 160 150 155 145 Arg Trp Ser Tyr Phe Arg Met Cys Lys Phe Leu Cys Tyr Phe Phe Tyr 165 170 175 Lys Asn Phe Ala Phe Thr Leu Val His Phe Trp Phe Gly Phe Phe Cys 190 180 185 Gly Phe Ser Ala Gln Val Gly Lys Ser Met Phe Phe Phe Val Cys Leu 195 200 205 Phe Val Cys Phe Cys Met Ile Leu Gln Met Thr Leu Leu His Ser Ser 220 210 215 Leu Leu Ile Asn Ser Glu His Phe Leu Met Ala Asp Ser Ser Asn Ser 225 240 230 235

<210> 3789

Ile Thr Ile Met

<211> 209

<212> PRT

<213> Homo sapiens

<400> 3789

Met Ser Ala Arg Arg Pro Leu Leu Ala Val Ala Thr His Val His Phe

1 5 10 15

Asp His Ser Gly Gly Leu Tyr Gln Phe Asp Arg Val Ala Val His His

20 25 30

Ala Glu Ala Glu Ala Leu Ala Arg Gly Asp Asn Phe Glu Thr Val Thr

35 40 45

Trp Leu Ser Asp Ser Glu Val Val Arg Ala Pro Ser Pro Gly Trp Arg Ala Arg Gln Phe Arg Val Gln Ala Val Gln Pro Thr Leu Ile Leu Gln Asp Gly Asp Val Ile Asn Leu Gly Asp Arg Gln Leu Thr Val Met His Met Pro Gly His Ser Arg Gly Ser Ile Cys Leu His Asp Lys Asp Arg Lys Ile Leu Phe Ser Gly Asp Val Val Tyr Asp Gly Ser Leu Ile Asp Trp Leu Pro Tyr Ser Arg Ile Ser Asp Tyr Val Gly Thr Cys Glu Arg Leu Ile Glu Leu Val Asp Arg Gly Leu Val Glu Lys Val Leu Pro Gly His Phe Asn Thr Phe Gly Ala Glu Arg Leu Phe Arg Leu Ala Ser Asn Tyr Ile Ser Lys Ala Gly Ile Cys His Lys Val Ser Thr Phe Ala Met Arg Ser Leu Ala Ser Leu Ala Leu Arg Val Thr Asn Ser Arg Thr Ser

Pro

<210> 3790

<211> 320

<212> PRT

<213> Homo sapiens

<400> 3790 Met Glu Gly Tyr Lys Phe Asp Leu Arg Ile Tyr Ile Leu Val Thr Ser Cys Asp Pro Leu Lys Ile Phe Leu Tyr His Asp Gly Leu Val Arg Met Gly Thr Glu Lys Tyr Ile Pro Pro Asn Glu Ser Asn Leu Thr Gln Leu Tyr Met His Leu Thr Asn Tyr Ser Val Asn Glu His Asn Glu His Phe Glu Arg Asp Glu Thr Glu Asn Lys Gly Ser Lys Arg Ser Ile Lys Trp Phe Thr Glu Phe Leu Gln Ala Asn Gln His Asp Val Ala Lys Phe Trp Ser Asp Ile Ser Glu Leu Val Val Lys Thr Leu Ile Val Ala Glu Pro His Val Leu His Ala Tyr Arg Met Cys Arg Pro Gly Gln Pro Pro Gly Ser Glu Ser Val Cys Phe Glu Val Leu Gly Phe Asp Ile Leu Leu Asp Arg Lys Leu Lys Pro Trp Leu Leu Glu Ile Asn Arg Ala Pro Ser Phe Gly Thr Asp Gln Lys Ile Asp Tyr Asp Val Lys Arg Gly Val Leu Leu Asn Ala Leu Lys Leu Leu Asn Ile Arg Thr Ser Asp Lys Arg Arg Asn Leu Ala Lys Gln Lys Ala Glu Ala Gln Arg Arg Leu Tyr Gly Gln Asn

210 215 220

Ser Ile Lys Arg Leu Leu Pro Gly Ser Ser Asp Trp Glu Gln Gln Arg

His Gln Leu Glu Arg Arg Lys Glu Glu Leu Lys Glu Arg Leu Ala Gln 225 230 235 240 Val Arg Lys Gln Ile Ser Arg Glu Glu His Glu Asn Arg His Met Gly 250 245 255 Asn Tyr Arg Arg Ile Tyr Pro Pro Glu Asp Lys Ala Leu Leu Glu Lys 260 265 270 Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg 275 280 285 Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys 290 300 295 Lys Ile Phe Trp Ile Phe Trp Ser Asn Val Lys Leu Met Met Lys Ser 305 310 320 315

<210> 3791

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3791

Met Gln Val Ala Leu Trp Gly Asp Lys Ile Pro Gln Trp Arg Val Val

1 5 10 15

Pro Asn Ala Val Glu Ser Gln Arg Arg Gly Arg His Leu Leu Arg Asp
20 25 30

Val Trp Glu Ala Pro Gln Arg Arg Trp Cys Trp Ser Arg Ala Trp Lys

35 40 45

Asp Gln Ala Glu Ser Trp Gly Lys Ala Phe His Leu Ala Arg Ala Gly
50 55 60

Gly Ser Ser Ser Thr Glu Leu Phe Pro Val Gln Val Ala Leu Lys Gly

Asn Lys Glu Phe His Ala Ile His Arg Ile Thr Asp Gly Glu Glu Ala Gly Glu Gly Asp Glu Arg Gly Arg Gly Pro Glu Pro Ser Ser Trp Gln Trp Glu Gly Lys Arg Arg Trp Thr Gln His Cys Val Gly Cys Phe Phe Phe <210> 3792 <211> 808 <212> PRT <213> Homo sapiens <400> 3792 Met Lys Lys Tyr Arg Lys Ile Ser Leu Leu Pro Lys Pro Pro Lys His Asp Ala Pro Leu Thr Ile Glu Phe Pro Asn Leu Asp Lys Thr Ser Ala Glu Trp Leu Lys Val Asn Gly Leu Lys Ala Lys Lys Leu Ser Leu Tyr Gln Val Leu Ala Pro Asn Ala Phe Ser Pro Val Glu Glu Phe Val Pro Ile Leu Gln Lys Thr Val Ser Ser Thr Ile His Glu Lys Ala Met Ile Gln Phe Glu Trp His Asp Gly Thr Val Lys Asn Ile His Val Asp Pro

Pro	Phe	Leu	Tyr	Lys	Tyr	Gln	GIn	Gln	Leu	Ser	Arg	Ala	Met	Arg	Met
			100					105					110		
Tyr	Glu	Arg	Arg	Ile	Glu	Trp	Leu	Ser	Leu	Ala	Ser	Arg	Arg	Ile	Trp
		115					120					125			
Gly	Thr	Val	Cys	Glu	Lys	Arg	Val	Val	Val	Leu	Leu	Asp	Ile	Ser	Ala
	130					135					140				
Thr	Asn	Ser	Met	Tyr	Ile	Ile	His	Ile	Gln	His	Ser	Leu	Arg	Leu	Leu
145					150					155					160
Leu	Glu	Glu	Gln	Leu	Ser	Asn	Lys	Asp	Cys	Phe	Asn	Leu	Ile	Ala	Phe
				165					170					175	
Gly	Ser	Thr	Ile	Glu	Ser	Trp	Arg	Pro	Glu	Met	Val	Pro	Val	Ser	His
			180					185					190		
Asn	Asn	Leu	Gln	Ser	Ala	Trp	Arg	Trp	Ala	Leu	Asn	Leu	Arg	Cys	Arg
		195					200					205			
Gly	Ser	Arg	Asn	Val	Leu	Ser	Ala	Leu	Arg	Lys	Ala	Val	Glu	Val	Asp
	210					215					220				
Phe	Lys	Asp	Lys	Asp	Lys	His	Gln	Ser	Gln	Gly	Ile	Tyr	Leu	Phe	Thr
225					230					235					240
Gly	Gly	Ile	Pro	Asp	Gln	Asp	Met	Pro	Thr	Leu	Ser	Ala	Tyr	Met	Ala
				245					250					255	
Glu	Ala	Cys	Gly	Gly	Cys	Asp	Leu	Gln	Leu	Asn	Val	Cys	Leu	Phe	Tyr
			260					265					270		
Val	Gly	Glu	Pro	Lys	Met	Asp	Thr	Ile	Pro	Pro	Ala	Arg	Tyr	Ala	Ser
		275					280					285			
His	Thr	Asp	Thr	Ala	Ala	Ala	Tyr	Lys	Glu	Val	Thr	Arg	Ala	Ala	Gly
	290					295					300				
Gly	Arg	Phe	His	Trp	Phe	Gly	Asp	Thr	Gly	Ile	Tyr	Glu	Ser	Asp	Asp
305					310					315					320
Ile	Asn	Ser	Ile	Met	Ser	Glu	Met	Glu	Lys	Ala	Leu	Asn	Tyr	Ser	Glr

				325					330					335	
Lys	Cys	Ala	Phe	Leu	Met	Ala	Ser	Leu	Lys	Asn	His	Ser	Gly	Lys	Val
			340					345					350		
Leu	Gly	Ser	Ser	Ala	Leu	Pro	Lys	Glu	Lys	Pro	Lys	Thr	Leu	Gln	Leu
		355					360					365			
Arg	Ser	Gln	Pro	Lys	Lys	Leu	Cys	Pro	Pro	Arg	Pro	Thr	Val	Pro	Leu
	370					375			-		380				
Gly	Ala	Arg	Met	Ser	Ile	Lys	Asp	Asp	Pro	Asp	Arg	Glu	Lys	Ser	Pro
385					390					395					400
Pro	Leu	Lys	Ser	Leu	Lys	Trp	Arg	Pro	Leu	Ser	Ser	Arg	Val	Gly	Ile
				405					410					415	
Ser	Pro	Ala	Ala	Ala	Gln	Pro	Thr	Lys	Glu	Gly	Met	Met	Glu	Leu	Arg
			420					425					430		
Arg	Lys	Thr	Lys	Ser	Arg	Glu	Ala	Glu	Thr	Ser	Leu	Leu	Leu	Phe	Tyr
		435					440					445			
Thr	Glu	Lys	Gly	Asn	Asp	Val	Gly	Ser	Val	Tyr	Lys	Lys	Tyr	Pro	Gln
	450					455					460				
Gly	Arg	Gly	Leu	Arg	Arg	Thr	Ser	Ser	Ser	Ile	Asp	Leu	Pro	Arg	Lys
465					470					475					480
Asp	Thr	Val	Cys	Ser	Ser	Gln	Glu	Trp	Val	Ala	Lys	Tyr	Gly	Leu	Lys
				485					490					495	
Lys	Leu	Lys	Leu	Glu	Ile	Ser	Arg	Cys	Met	Gly	Pro	Asn	Cys	Thr	His
			500					505					510		
Gln	Lys	Ser	Gly	Gln	Arg	Ser	Ala	Ser	Ala	Lys	His	Cys	Ser	Ile	Phe
		515					520					525			
Pro	Ser	Val	Glu	Ile	His	Gly	Val	Val	Arg	His	Ile	Gln	Trp	Thr	Pro
	530					535					540				
Arg	Glu	Met	Glu	Val	Tyr	Ile	Arg	His	Leu	Glu	Lys	Val	Leu	Arg	Arg
545					550					555					560

Tyr	Val	Gln	Arg	Leu	Gln	Trp	Leu	Leu	Ser	Gly	Ser	Arg	Arg	Leu	Phe
				565					570					575	
Gly	Thr	Val	Leu	Glu	Ser	Lys	Val	Cys	Ile	Leu	Leu	Asp	Thr	Ser	Gly
			580					585					590		
Ser	Met	Gly	Pro	Tyr	Leu	Gln	Gln	Val	Lys	Thr	Glu	Leu	Val	Leu	Leu
		595					600					605			
Ile	Trp	Glu	Gln	Leu	Arg	Lys	Cys	Cys	Asp	Ser	Phe	Asn	Leu	Leu	Ser
	610					615					620				
Phe	Ala	Glu	Ser	Leu	Gln	Ser	Trp	Gln	Asp	Thr	Leu	Val	Glu	Thr	Thr
625					630					635					640
Asp	Ala	Ala	Cys	His	Glu	Ala	Met	Gln	Trp	Val	Thr	His	Leu	Gln	Ala
				645					650					655	
Gln	Gly	Ser	Thr	Ser	Ile	Leu	Gln	Ala	Leu	Leu	Lys	Ala	Phe	Ser	Phe
			660					665					670		
His	Asp	Leu	Glu	Gly	Leu	Tyr	Leu	Leu	Thr	Asp	Gly	Lys	Pro	Asp	Thr
		675					680					685			
Ser	Cys	Ser	Leu	Val	Leu	Asn	Glu	Val	Gln	Lys	Leu	Arg	Glu	Lys	Arg
	690					695					700				
Asp	Val	Lys	Val	His	Thr	Ile	Ser	Leu	Asn	Cys	Ser	Asp	Arg	Ala	Ala
705					710					715					720
Val	Glu	Phe	Leu	Arg	Lys	Leu	Ala	Ser	Phe	Thr	Gly	Gly	Arg	Tyr	His
				725					730					735	
Cys	Pro	Val	Gly	Glu	Asp	Thr	Leu	Ser	Lys	Ile	His	Ser	Leu	Leu	Thr
			740					745					750		
Lys	Gly	Phe	Ile	Asn	Glu	Lys	Asp	Pro	Thr	Leu	Pro	Pro	Phe	Glu	Gly
		755					760					765			
Asp	Asp	Leu	Arg	Ile	Leu	Ala	Gln	Glu	Ile	Thr	Lys	Ala	Arg	Ser	Phe
	770					775					780				
Leu	Trn	Gln	Ala	Gln	Ser	Phe	Arg	Ser	Gln	Leu	Gln	Lys	Lys	Asn	Asp

785 790 795 800 Ala Glu Pro Lys Val Thr Leu Ser

805

<210> 3793

<211> 625

<212> PRT

<213> Homo sapiens

<400> 3793

Met Arg Asn Gly Ser Gly Asn Trp Leu Ala Asp Gln Ile Arg Arg Asn

1 5 10 15

Arg Val Val Glu Gly Pro Gly Thr Pro Ser Lys Gly Gln Arg Trp Cys

20 25 30

Thr Leu His Thr Glu Phe Leu Trp Tyr Asp Gly Ser Leu Lys Ser Val

35 40 45

Pro Pro Pro Asp Phe Gly Thr Pro Thr Leu His Tyr Phe Glu Asp Trp

50 55 60

Gly Val Val Thr Tyr Gly Ser Ala Leu Pro Ala Glu Ile Asn Arg Ser

65 70 75 80

Phe Leu Ser Phe Lys Ser Gly Lys Leu Gly Gly Arg Ala Ile Tyr Asp

85 90 95

Ile Val His Arg Asn Lys Tyr Lys Asp Trp Ile Lys Gly Trp Arg Asn

100 105 110

Phe Asn Ala Gly His Glu His Pro Asp Gln Asn Ser Phe Thr Phe Ala

115 120 125

Pro Asn Gly Val Pro Phe Ile Thr Glu Ala Leu Tyr Gly Pro Lys Tyr

130 135 140

Thr	Phe	Phe	Asn	Asn	Val	Leu	Met	Phe	Ser	Pro	Ala	Val	Ser	Lys	Ser
145					150					155					160
Cys	Phe	Ser	Pro	Trp	Val	Gly	Gln	Val	Thr	Glu	Asp	Cys	Ser	Ser	Lys
				165					170					175	
Trp	Ser	Lys	Tyr	Lys	His	Asp	Leu	Ala	Ala	Ser	Cys	Gln	Gly	Arg	Val
			180					185					190		
Val	Ala	Ala	Glu	Glu	Lys	Asn	Gly	Val	Val	Phe	Ile	Arg	Gly	Glu	Gly
		195					200					205			
Val	Gly	Ala	Tyr	Asn	Pro	Gln	Leu	Asn	Leu	Lys	Asn	Val	Gln	Arg	Asn
	210					215					220				
Leu	Ile	Leu	Leu	His	Pro	Gln	Leu	Leu	Leu	Leu	Val	Asp	Gln	Ile	His
225					230					235					240
Leu	Gly	Glu	Glu	Ser	Pro	Leu	Glu	Thr	Ala	Ala	Ser	Phe	Phe	His	Asr
				245					250					255	
Val	Asp	Val	Pro	Phe	Glu	Glu	Thr	Val	Val	Asp	Gly	Val	His	Gly	Ala
			260					265					270		
Phe	Ile	Arg	Gln	Arg	Asp	Gly	Leu	Tyr	Lys	Met	Tyr	Trp	Met	Asp	Asp
		275					280					285			
Thr	Gly	Tyr	Ser	Glu	Lys	Ala	Thr	Phe	Ala	Ser	Val	Thr	Tyr	Pro	Arg
	290					295					300				
Gly	Tyr	Pro	Tyr	Asn	Gly	Thr	Asn	Tyr	Val	Asn	Val	Thr	Met	His	Leu
305					310					315					320
Arg	Ser	Pro	Ile	Thr	Arg	Ala	Ala	Tyr	Leu	Phe	Ile	Gly	Pro	Ser	Πle
				325					330					335	
Asp	Val	Gln	Ser	Phe	Thr	Val	His	Gly	Asp	Ser	Gln	Gln	Leu	Asp	Val
			340					345					350		•
Phe	Ile	Ala	Thr	Ser	Lys	His	Ala	Tyr	Ala	Thr	Tyr	Leu	Trp	Thr	Gly
		355					360					365			
Glu	Ala	Thr	Gly	Gln	Ser	Ala	Phe	Ala	Gln	Val	Ile	Ala	Asp	Arg	His

Lys Ile Leu Phe Asp Arg Asn Ser Ala Ile Lys Ser Ser Ile Val Pro Glu Val Lys Asp Tyr Ala Ala Ile Val Glu Gln Asn Leu Gln His Phe Lys Pro Val Phe Gln Leu Leu Glu Lys Gln Ile Leu Ser Arg Val Arg Asn Thr Ala Ser Phe Arg Lys Thr Ala Glu Arg Leu Leu Arg Phe Ser Asp Lys Arg Gln Thr Glu Glu Ala Ile Asp Arg Ile Phe Ala Ile Ser Gln Gln Gln Gln Gln Ser Lys Ser Lys Lys Asn Arg Arg Ala Gly Lys Arg Tyr Lys Phe Val Asp Ala Val Pro Asp Ile Phe Ala Gln Ile Glu Val Asn Glu Lys Lys Ile Arg Gln Lys Ala Gln Ile Leu Ala Gln Lys Glu Leu Pro Ile Asp Glu Asp Glu Glu Met Lys Asp Leu Leu Asp Phe Ala Asp Val Thr Tyr Glu Lys His Lys Asn Gly Gly Leu Ile Lys Gly Arg Phe Gly Gln Ala Arg Met Val Thr Thr His Ser Arg Ala Pro Ser Leu Ser Ala Ser Tyr Thr Arg Leu Phe Leu Ile Leu Asn Ile Ala Ile Phe Phe Val Met Leu Ala Met Gln Leu Thr Tyr Phe Gln Arg Ala Gln Ser Leu His Gly Gln Arg Cys Leu Tyr Ala Val Leu Leu Ile

Asp Ser Cys Ile Leu Leu Trp Leu Tyr Ser Ser Cys Ser Gln Ser Gln 610 615 620

Cys

625

<210> 3794

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3794

Met Ala Gly Leu His Ser Ser Asp Lys Val Gly Pro Lys Phe Ser Ile

1 5 10 15

Pro Ser Pro Thr Phe Ser Lys Ser Ser Ser Ala Ile Ser Glu Val Thr
20 25 30

Gln Pro Pro Ser Tyr Glu Asp Ala Val Lys Gln Gln Met Thr Arg Ser 35 40 45

Gln Gln Met Asp Glu Leu Leu Asp Val Leu Ile Glu Ser Gly Glu Met
50 55 60

Pro Ala Asp Ala Arg Glu Asp His Ser Cys Leu Gln Lys Val Pro Lys
65 70 75 80

Ile Pro Arg Ser Ser Arg Ser Pro Thr Ala Val Leu Thr Lys Pro Ser 85 90 95

Ala Ser Phe Glu Gln Ala Ser Ser Gly Ser Gln Ile Pro Phe Asp Pro
100 105 110

Tyr Ala Thr Asp Ser Asp Glu His Leu Glu Val Leu Leu Asn Ser Gln 115 120 125

Ser Pro Leu Gly Lys Met Ser Asp Val Thr Leu Leu Lys Ile Gly Ser

Glu Glu Pro His Phe Asp Gly Ile Met Asp Gly Phe Ser Gly Lys Ala Ala Glu Asp Leu Phe Asn Ala His Glu Ile Leu Pro Gly Pro Leu Ser Pro Met Gln Thr Gln Phe Ser Pro Ser Ser Val Asp Ser Asn Gly Leu Gln Leu Ser Phe Thr Glu Ser Pro Trp Glu Thr Met Glu Trp Leu Asp Leu Thr Pro Pro Asn Ser Thr Pro Gly Phe Ser Ala Leu Thr Thr Ser Ser Pro Ser Ile Phe Asn Ile Asp Phe Leu Asp Val Thr Asp Leu Asn Leu Asn Ser Ser Met Asp Leu His Leu Gln Gln Trp

<210> 3795

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3795

Met Thr Arg Asn Ala Val Trp Ala Leu Ser Asn Leu Cys Arg Gly Lys

1 5 10 15

Asn Pro Pro Pro Glu Phe Ala Lys Val Ser Pro Cys Leu Pro Val Leu
20 25 30

Ser Arg Leu Leu Phe Ser Ser Asp Ser Asp Leu Leu Ala Asp Ala Cys
35 40 45

Trp	Ala	Leu	Ser	Tyr	Leu	Ser	Asp	Gly	Pro	Asn	Glu	Lys	Ile	Gln	Ala
	50					55					60				
Val	Ile	Asp	Ser	Gly	Val	Cys	Arg	Arg	Leu	Val	Glu	Leu	Leu	Met	His
65					70					75					80
Asn	Asp	Tyr	Lys	Val	Ala	Ser	Pro	Ala	Leu	Arg	Ala	Val	Gly	Asn	Ile
				85					90					95	
Val	Thr	Gly	Asp	Asp	Ile	Gln	Thr	Gln	Val	Ile	Leu	Asn	Cys	Ser	Ala
			100					105					110		
Leu	Pro	Cys	Leu	Leu	His	Leu	Leu	Ser	Ser	Pro	Lys	Glu	Ser	Ile	Arg
		115					120					125			
Lys	Glu	Ala	Cys	Trp	Thr	Ile	Ser	Asn	Ile	Thr	Ala	Gly	Asn	Arg	Ala
	130					135					140				
Gln	Ile	Gln	Ala	Val	Ile	Asp	Ala	Asn	Ile	Phe	Pro	Val	Leu	Ile	Glu
145					150					155					160
Ile	Leu	Gln	Lys	Ala	Glu	Phe	Arg	Thr	Arg	Lys	Glu	Ala	Ala	Trp	Ala
				165					170					175	
Ile	Thr	Asn	Ala	Thr	Ser	Gly	Gly	Thr	Pro	Glu	Gln	Ile	Arg	Tyr	Leu
			180					185					190		
Val	Ser	Leu	Gly	Cys	Ile	Lys	Pro	Leu	Cys	Asp	Leu	Leu	Thr	Val	Met
		195					200					205			
Asp	Ser	Lys	Ile	Val	Gln	Val	Ala	Leu	Asn	Gly	Leu	Glu	Asn	Ile	Leu
	210					215					220				
Arg	Leu	Gly	Glu	Gln	Glu	Gly	Lys	Arg	Ser	Gly	Ser	Gly	Val	Asn	Pro
225					230					235					240
Tyr	Cys	Gly	Leu	Ile	Glu	Glu	Ala	Tyr	Gly	Leu	Asp	Lys	Ile	Glu	Phe
				245					250					255	
Leu	Gln	Ser	His	Glu	Asn	Gln	Glu	Ile	Tyr	Gln	Lys	Ala	Phe	Asp	Leu
			260					265					270		
He	Glu	His	Tvr	Phe	Glv	Val	Glu	Asp	Asp	Asp	Ser	Ser	Leu	Ala	Pro

275 280 285

Gln Val Asp Glu Thr Gln Gln Gln Phe Ile Phe Gln Gln Pro Glu Ala 290 295 300

Pro Met Glu Gly Phe Gln Leu

305 310

<210> 3796

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3796

Met Trp Ile Leu Leu Phe Gln Leu Ser Ser Ala Leu Cys Phe Arg Met

1 5 10 15

Thr Ile Ser Val Gly Tyr Phe Gly Leu Ser Leu Asp Thr Pro Asn Leu 20 25 30

His Gly Asp Ile Phe Val Asn Cys Phe Leu Ser Ala Met Val Glu Val
35 40 45

Pro Ala Tyr Val Leu Ala Trp Leu Leu Gln Tyr Leu Pro Arg Arg
50 55 60

Tyr Ser Met Ala Thr Ala Leu Phe Leu Gly Gly Ser Val Leu Leu Phe
65 70 75 80

Met Gln Leu Val Pro Pro Asp Leu Tyr Tyr Leu Ala Thr Val Leu Val 85 90 95

Met Val Gly Lys Phe Gly Val Thr Ala Ala Phe Ser Met Val Tyr Val 100 105 110

Tyr Thr Ala Glu Leu Tyr Pro Thr Val Val Arg Asn Met Gly Val Gly
115 120 125

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Val Ser Ser Thr Ala Ser Arg Leu Gly Ser Ile Leu Ser Pro Tyr Phe 130 135 140 Val Tyr Leu Gly Ala Tyr Asp Arg Phe Leu Pro Tyr Ile Leu Met Gly 150 155 145 160 Ser Leu Thr Ile Leu Thr Ala Ile Leu Thr Leu Phe Leu Pro Glu Ser 165 170 175 Phe Gly Thr Pro Leu Pro Asp Thr Ile Asp Gln Met Leu Arg Val Lys 190 180 185 Gly Met Lys His Arg Lys Thr Pro Ser His Thr Arg Met Leu Lys Asp 200 205 195 Gly Gln Glu Arg Pro Thr Ile Leu Lys Ser Thr Ala Phe 220 210 215

<210> 3797

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3797

Met His Cys Thr Pro Ser Cys His Arg Ala Leu Ala Pro Ala Ala Cys

1 5 10 15

Thr Ala Leu Pro Leu Ala Pro Leu Ser Asp Gln Leu Pro Leu Ile Leu 20 25 30

Gln Ile Ser Ala Trp Met Ser Pro Pro Glu Gly Arg Cys Ala Cys Leu 35 40 45

Pro Arg Gln Ser Arg Cys Cys His Leu Leu Thr Glu Ser Gly Phe Leu 50 55 60

Pro Gln Ser Thr Pro Val Ser Ile Cys Leu Thr Leu Ser Leu His Leu

65 70 75 80

Asp Cys Lys Val Arg Glu Ser Arg Asp His Thr His Leu Cys Ser Leu

85 90 95

Gly Thr Tyr Ser Leu

100 .

<210> 3798

<211> 258

<212> PRT

<213> Homo sapiens

<400> 3798

Met Tyr Tyr Ala Val Glu Ile Leu Phe Asn Arg Gln Ser Ala Phe Phe 1 5 10 15

Ser Ala Val Pro Asn Met Pro Gln Gln Arg Gln Asp Gln His His Gln
20 25 30

Ser Ala Met Met His Pro Ala Ser Ala Ala Gly Pro Pro Ile Ala Ala 35 40 45

Thr Pro Pro Ala Tyr Ser Thr Gln Tyr Val Ala Tyr Ser Pro Gln Gln 50 55 60

Phe Pro Asn Gln Pro Leu Val Gln His Val Pro His Tyr Gln Ser Gln 65 70 75 80

His Pro His Val Tyr Ser Pro Val Ile Gln Gly Asn Ala Arg Met Met

85 90 95

Ala Pro Pro Thr His Ala Gln Pro Gly Leu Val Ser Ser Ser Ala Thr
100 105 110

Gln Tyr Gly Ala His Glu Gln Thr His Ala Met Tyr Val Ser Thr Gly
115 120 125

Ser Leu Ala Gln Gln Tyr Ala His Pro Asn Ala Thr Leu His Pro His 130 135 140 Thr Pro His Pro Gln Pro Ser Ala Thr Pro Thr Gly Gln Gln Gen Ser 150 145 155 160 Gln His Gly Gly Ser His Pro Ala Pro Ser Pro Val Gln His His Gln 170 165 175 His Gln Ala Ala Gln Ala Leu His Leu Ala Ser Pro Gln Gln Gln Ser 180 185 190 Ala Ile Tyr His Ala Gly Leu Ala Pro Thr Pro Pro Ser Met Thr Pro 200 205 195 Ala Ser Asn Thr Gln Ser Pro Gln Asn Ser Phe Pro Ala Ala Gln Gln 210 215 220 Thr Val Phe Thr Ile His Pro Ser His Val Gln Pro Ala Tyr Thr Asn 225 230 235 240 Pro Pro His Met Ala His Val Pro Gln Val Ile Pro Ala Leu Ala Asn 245 250 255 Phe Leu

<210> 3799

<211> 531

<212> PRT

<213> Homo sapiens

<400> 3799

Met Asp Phe Gly Leu Ala Trp Val Phe Leu Val Ala Leu Leu Arg Gly

1 5 10 15

Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln

			20					25					30		
Pro	Gly	Arg	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Pro	Phe
		35					40					45			
Ser	Thr	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
	50					55					60				
Glu	Trp	Val	Ala	Leu	Ile	Ser	Asp	Glu	Gly	Thr	Lys	Gln	Phe	Tyr	Leu
65					70					75					80
Asp	Ser	Val	Arg	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Arg
				85					90					95	
Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Val	Glu	Asp	Thr	Ala	Lys
			100					105					110		
Tyr	Tyr	Cys	Ala	Lys	Asp	Val	Ser	Gly	Ser	Gly	Trp	Phe	Phe	Met	Tyr
		115					120					125			
Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Ala	Ser	Ser	Ala
	130				·	135					140				
Pro	Thr	Lys	Ala	Pro	Asp	Val	Phe	Pro	Ile	Ile	Ser	Gly	Cys	Arg	His
145					150					155					160
Pro	Lys	Asp	Asn	Ser	Pro	Val	Val	Leu	Ala	Cys	Leu	Ile	Thr	Gly	Tyr
				165					170					175	
His	Pro	Thr	Ser	Val	Thr	Val	Thr	Trp	Tyr	Met	Gly	Thr	Gln	Ser	Gln
			180					185					190		
Pro	Gln	Arg	Thr	Phe	Pro	Glu	Ile	Gln	Arg	Arg	Asp	Ser	Tyr	Tyr	Met
		195					200					205			
Thr	Ser	Ser	Gln	Leu	Ser	Thr	Pro	Leu	Gln	Gln	Trp	Arg	Gln	Gly	Glu
	210					215					220				
Tyr	Lys	Cys	Val	Val	Gln	His	Thr	Ala	Ser	Lys	Ser	Lys	Lys	Glu	Ile
225					230					235					240
Phe	Arg	Trp	Pro	Glu	Ser	Pro	Lys	Ala	Gln	Ala	Ser	Ser	Val	Pro	Thr
				245					250					255	

Ala	Gln	Pro	Gln	Ala	Glu	Gly	Ser	Leu	Ala	Lys	Ala	Thr	Thr	Ala	Pro
			260					265					270		
Ala	Thr	Thr	Arg	Asn	Thr	Gly	Arg	Gly	Gly	Glu	Glu	Lys	Lys	Lys	Glu
		275					280					285			
Lys	Glu	Lys	Glu	Glu	Gln	Glu	Glu	Arg	Glu	Thr	Lys	Thr	Pro	Glu	Cys
	290					295					300				
Pro	Ser	His	Thr	Gln	Pro	Leu	Gly	Val	Tyr	Leu	Leu	Thr	Pro	Ala	Val
305					310					315					320
Gln	Asp	Leu	Trp	Leu	Arg	Asp	Lys	Ala	Thr	Phe	Thr	Cys	Phe	Val	Val
				325					330					335	
Gly	Ser	Asp	Leu	Lys	Asp	Ala	His	Leu	Thr	Trp	Glu	Val	Ala	Gly	Lys
			340					345					350		
Val	Pro	Thr	Gly	Gly	Val	Glu	Glu	Gly	Leu	Leu	Glu	Arg	His	Gly	Asn
		355					360					365			
Gly	Ser	Gln	Ser	Gln	His	Ser	Arg	Leu	Thr	Leu	Pro	Arg	Ser	Leu	Trp
	370					375					380				
Asn	Ala	Gly	Thr	Ser	Val	Thr	Cys	Thr	Leu	Asn	His	Pro	Ser	Leu	Pro
385					390					395					400
Pro	Gln	Arg	Leu	Met	Ala	Leu	Arg	Glu	Pro	Ala	Ala	Gln	Ala	Pro	Val
				405					410					415	
Lys	Leu	Ser	Leu	Asn	Leu	Leu	Ala	Ser	Ser	Asp	Pro	Pro	Glu	Ala	Ala
			420					425					430		
Ser	Trp	Leu	Leu	Cys	Glu	Val	Ser	Gly	Phe	Ser	Pro	Pro	Asn	Ile	Leu
		435					440					445			
Leu	Met	Trp	Leu	Glu	Asp	Gln	Arg	Glu	Val	Asn	Thr	Ser	Gly	Phe	Ala
	450					455					460				
Pro	Ala	Arg	Pro	Pro	Pro	Gln	Pro	Arg	Ser	Thr	Thr	Phe	Trp	Ala	Trp
465					470					475					480
Ser	Val	Leu	Arg	Val	Pro	Ala	Pro	Pro	Ser	Pro	Gln	Pro	Val	Thr	Tvr

Thr Cys Val Val Ser His Glu Asp Ser Arg Thr Leu Leu Asn Ala Ser Arg Ser Leu Glu Val Ser Cys Glu Ser Pro Pro Gly Pro Gly Leu Gly Arg Gly Leu <210> 3800 <211> 516 <212> PRT <213> Homo sapiens <400> 3800 Met Pro Ser Ser Thr Ser Pro Asp Gln Gly Asp Asp Leu Glu Asn Cys Ile Leu Arg Phe Ser Asp Leu Asp Leu Lys Asp Met Ser Phe Ile Asn Pro Ser Ser Ser Leu Lys Ala Glu Leu Asp Gly Ser Thr Lys Lys Tyr Ser Phe Ala Lys Lys Lys Ala Phe Ala Leu Phe Val Lys Thr Lys Glu Val Pro Thr Lys Arg Ser Phe Glu Cys Lys Glu Lys Leu Trp Lys Cys Cys Arg Gln Leu Phe Thr Asp Gln Thr Ser Ile His Arg His Val

Ala Thr Gln His Ala Asp Glu Ile Tyr His Gln Thr Ala Ser Ile Leu

Lys	Gln	Leu	Ala	Val	Thr	Leu	Ser	Thr	Ser	Lys	Ser	Leu	Ser	Ser	Ala
		115					120					125			
Asp	Glu	Lys	Asn	Pro	Leu	Lys	Glu	Cys	Leu	Pro	His	Ser	His	Asp	Val
	130					135					140				
Ser	Ala	Trp	Leu	Pro	Asp	Ile	Ser	Cys	Phe	Asn	Pro	Asp	Glu	Leu	Ile
145					150					155					160
Ser	Gly	Gln	Gly	Ser	Glu	Glu	Gly	Glu	Val	Leu	Leu	Tyr	Tyr	Cys	Tyr
				165				•	170					175	
His	Asp	Leu	Glu	Asp	Pro	Gln	Trp	Ile	Cys	Ala	Trp	Gln	Thr	Ala	Leu
			180					185					190		
Cys	Gln	His	Leu	His	Leu	Thr	Gly	Lys	Ile	Arg	Ile	Ala	Ala	Glu	Gly
		195					200					205			
Ile	Asn	Gly	Thr	Val	Gly	Gly	Ser	Lys	Leu	Ala	Thr	Arg	Leu	Tyr	Val
	210					215					220				
Glu	Val	Met	Leu	Ser	Phe	Pro	Leu	Phe	Lys	Asp	Asp	Leu	Cys	Lys	Asp
225					230					235					240
Asp	Phe	Lys	Thr	Ser	Lys	Gly	Gly	Ala	His	Cys	Phe	Pro	Glu	Leu	Arg
				245					250					255	
Val	Gly	Val	Phe	Glu	Glu	Ile	Val	Pro	Met	Gly	Ile	Ser	Pro	Lys	Lys
			260					265					270		
Ile	Ser	Tyr	Lys	Lys	Pro	Gly	Ile	His	Leu	Ser	Pro	Gly	Glu	Phe	His
		275					280				٠	285			
Lys	Glu	Val	Glu	Lys	Phe	Leu	Ser	Gln	Ala	Asn	Gln	Glu	Gln	Ser	Asp
	290					295					300				
Thr	Ile	Leu	Leu	Asp	Cys	Arg	Asn	Phe	Tyr	Glu	Ser	Lys	Ile	Gly	Arg
305					310					315					320
Phe	Gln	Gly	Cys	Leu	Ala	Pro	Asp	Ile	Arg	Lys	Phe	Ser	Tyr	Phe	Pro
				325					330					335	
Ser	Tyr	Val	Asp	Lys	Asn	Leu	Glu	Leu	Phe	Arg	Glu	Lys	Arg	Val	Leu

			340					345					350		
Met	Tyr	Cys	Thr	Gly	Gly	Ile	Arg	Cys	Glu	Arg	Gly	Ser	Ala	Tyr	Leu
		355					360					365			
Lys	Ala	Lys	Gly	Val	Cys	Lys	Glu	Val	Phe	Gln	Leu	Lys	Gly	Gly	Ile
	370					375					380				
His	Lys	Tyr	Leu	Glu	Glu	Phe	Pro	Asp	Gly	Phe	Tyr	Lys	Gly	Lys	Leu
385					390					395					400
Phe	Val	Phe	Asp	Glu	Arg	Tyr	Ala	Leu	Ser	Tyr	Asn	Ser	Asp	Val	Val
				405					410					415	
Ser	Glu	Cys	Ser	Tyr	Cys	Gly	Ala	Arg	Trp	Asp	Gln	Tyr	Lys	Leu	Cys
			420					425					430		
Cys	Thr	Pro	Gln	Cys	Arg	Gln	Leu	Val	Leu	Thr	Cys	Pro	Ala	Cys	Gln
		435					440					445			
Gly	Gln	Gly	Phe	Thr	Ala	Cys	Cys	Val	Thr	Cys	Gln	Asp	Lys	Gly	Ser
	450					455					460				
Arg	Lys	Val	Ser	Gly	Pro	Met	Gln	Asp	Ser	Phe	Lys	Glu	Glu	Cys	Glu
465					470					475					480
Cys	Thr	Ala	Arg	Arg	Pro	Arg	Ile	Pro	Arg	Glu	Leu	Leu	Gln	His	Val
				485					490					495	
Arg	Gln	Pro	Val	Ser	Pro	Glu	Pro	Gly	Pro	Asp	Ala	Asp	Glu	Asp	Gly
			500					505					510		
Pro	Val	Leu	Met												

<210> 3801

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3801

Met Leu Leu Val Trp Ser Arg Met Leu Ser Leu Leu Phe Phe

1 5 10 15

Ser Phe Phe Phe Glu Thr Glu Ser Arg Ser Val Ala Gln Val Gly Val

20 25 30

Gln Trp His Asn Leu Cys Ser Leu Gln Thr Ala Ser Gln Val Gln Ala

35 40 45

Ile Leu Leu Ile Gln Pro Pro Lys Trp Leu Gly Leu Arg Ala Tyr Ala

50 55 60

Thr Ala Pro Gly Tyr Phe Phe Val Phe Leu Val Glu Ile Gly Phe His

65 70 75 80

His Val Gly Arg Pro Gly Leu Lys Leu Leu Thr Ser Gly Asp Pro Pro

85 90 95

Ala Leu Ala Ser Gln Gly Ala Gly Ile Ala Gly Val Ser His Arg Thr

100 105 110

Trp Pro Phe His Phe Phe Thr Ser His Ile Thr Phe Leu Ala His Ile

115 120 125

Lys Leu Leu Phe Asn

130

<210> 3802

<211> 1372

<212> PRT

<213> Homo sapiens

<400> 3802

Met Gly His Leu Trp Leu Leu Gly Ile Trp Gly Leu Cys Gly Leu Leu

1				5					10					15	
Leu	Cys	Ala	Ala	Asp	Pro	Ser	Thr	Asp	Gly	Ser	Gln	Ile	Ile	Pro	Lys
	٠		20					25					30		
Val	Thr	Glu	Ile	Ile	Pro	Lys	Tyr	Gly	Ser	Ile	Asn	Gly	Ala	Thr	Arg
		35					40					45			
Leu	Thr	Ile	Arg	Gly	Glu	Gly	Phe	Ser	Gln	Ala	Asn	Gln	Phe	Asn	Tyr
	50					55					60				
Gly	Val	Asp	Asn	Ala	Glu	Leu	Gly	Asn	Ser	Val	Gln	Leu	Ile	Ser	Ser
65		٠			70					75					80
Phe	Gln	Ser	Ile	Thr	Cys	Asp	Val	Glu	Lys	Asp	Ala	Ser	His	Ser	Thr
				85					90					95	
Gln	Ile	Thr	Cys	Tyr	Thr	Arg	Ala	Met	Pro	Glu	Asp	Ser	Tyr	Thr	Val
			100					105					110		
Arg	Val	Ser	Val	Asp	Gly	Val	Pro	Val	Thr	Glu	Asn	Asn	Thr	Cys	Lys
		115					120					125			
Gly	His	Ile	Asn	Ser	Trp		Cys	Thr	Phe	Asn	Ala	Lys	Ser	Phe	Arg
	130					135					140				
	Pro	Thr	Ile	Arg		Ile	Thr	Pro	Leu		Gly	Thr	Pro	Gly	
145					150					155		_		_	160
Leu	Ile	Thr	Ile		Gly	Arg	Ile	Phe		Asp	Val	Tyr	Gly	Ser	Asn
		_	_	165		٥.	_		170				•	175	
He	Ala	Leu		Ser	Asn	Gly	Lys		Val	Arg	He	Leu		Val	lyr
т,	01	01	180	D		0.1		185	T 1	D	C1	C	190	Δ.	T
He	Gly		Met	Pro	Cys	Glu		Leu	пе	Pro	GIN		Asp	Asn	Leu
т.	Cl	195	T	T -	Α	11.	200 Date	A	C1-	Δ	Ma 4	205	C	Ma +	Vol
ıyr	_	Leu	Lys	Leu	Asp		rro	ASN	ыу	Asp		ыу	ser	Met	vai
C	210	TI	TI-	C1-	TI	215	T 1-	C1-	11:-	II: -	220	W- 1	C	Dha	Tlo
	Lys	ınr	ınr	ыу		rne	ше	ыу	HIS		ASN	vai	ser	Phe	
225					230					235					240

Leu	Asp	Asn	Asp	Tyr	Gly	Arg	Ser	Phe	Pro	Gln	Lys	Met	Ala	Tyr	Phe
				245					250					255	
Val	Ser	Ser	Leu	Asn	Lys	Ile	Ala	Met	Phe	Gln	Thr	Tyr	Ala	Glu	Val
			260					265					270		
Thr	Met	Ile	Phe	Pro	Ser	Gln	Gly	Ser	Ile	Arg	Gly	Gly	Thr	Thr	Leu
		275					280					285			
Thr	Ile	Ser	Gly	Arg	Phe	Phe	Asp	Gln	Thr	Asp	Phe	Pro	Val	Arg	Val
	290					295					300				
Leu	Val	Gly	Gly	Glu	Pro	Cys	Asp	Ile	Leu	Asn	Val	Thr	Glu	Asn	Ser
305					310					315				•	320
Ile	Cys	Cys	Lys	Thr	Pro	Pro	Lys	Pro	His	Ile	Leu	Lys	Thr	Val	Tyr
				325		٠			330					335	
Pro	Gly	Gly	Arg	Gly	Leu	Lys	Leu	Glu	Val	Trp	Asn	Asn	Ser	Arg	Pro
			340					345					350		
Ile	Arg	Leu	Glu	Glu	Ile	Leu	Glu	Tyr	Asn	Glu	Lys	Thr	Pro	Gly	Tyr
		355					360					365			
Met	Gly	Ala	Ser	Trp	Val	Asp	Ser	Ala	Ser	Tyr	Ile	Trp	Leu	Met	Glu
	370					375					380				
Gln	Asp	Thr	Phe	Val	Ala	Arg	Phe	Ser	Gly	Phe	Leu	Val	Ala	Pro	Asp
385					390					395					400
Ser	Asp	Val	Tyr	Arg	Phe	Tyr	Ile	Lys	Gly	Asp	Asp	Arg	Tyr	Ala	Ιlϵ
				405					410					415	
Tyr	Phe	Ser	Gln	Thr	Gly	Leu	Pro	Glu	Asp	Lys	Val	Arg	Ile	Ala	Tyr
			420					425					430		
His	Ser	Ala	Asn	Ala	Asn	Ser	Tyr	Phe	Ser	Ser	Pro	Thr	Gln	Arg	Ser
		435					440					445			
Asp	Asp	Ile	His	Leu	Gln	Lys	Gly	Lys	Glu	Tyr	Tyr	Ile	Glu	Ile	Leu
	450					455					460				
Leu	Gln	Glu	Tvr	Arg	Leu	Ser	Ala	Phe	Val	Asp	Val	Glv	Leu	Tvr	Glr

465					470					475					480
Tyr	Arg	Asn	Val	Tyr	Thr	Glu	Gln	Gln	Thr	Gly	Asp	Ala	Val	Asn	Glu
				485					490					495	
Glu	Gln	Val	Ile	Lys	Ser	Gln	Ser	Thr	Ile	Leu	Gln	Glu	Val	Gln	Val
		•	500					505					510		
Ile	Thr	Leu	Glu	Asn	Trp	Glu	Thr	Thr	Asn	Ala	Ile	Asn	Glu	Val	Gln
		515					520					525			
Lys	Ile	Lys	Val	Thr	Ser	Pro	Cys	Val	Glu	Ala	Asn	Ser	Cys	Ser	Leu
	530					535					540				
Tyr	Gln	Tyr	Arg	Leu	Ile	Tyr	Asn	Met	Glu	Lys	Thr	Val	Phe	Leu	Pro
545					550					555					560
Ala	Asp	Ala	Ser	Glu	Phe	Ile	Leu	Gln	Ser	Ala	Leu	Asn	Asp	Leu	Trp
				565					570					575	
Ser	Ile	Lys	Pro	Asp	Thr	·Val	Gln	Val	Ile	Arg	Thr	Gln	Asn	Pro	Gln
			580					585					590		
Ser	Tyr	Val	Tyr	Met	Val	Thr	Phe	Ile	Ser	Thr	Arg	Gly	Asp	Phe	Asp
		595					600					605			
Leu	Leu	Gly	Tyr	Glu	Val	Val	Glu	Gly	Asn	Asn	Val	Thr	Leu	Asp	Ile
	610					615					620				
Thr	Glu	Gln	Thr	Lys	Gly	Lys	Pro	Asn	Leu	Glu	Thr	Phe	Thr	Leu	Asn
625					630					635					640
Trp	Asp	Gly	Ile	Ala	Ser	Lys	Pro	Leu	Thr	Leu	Trp	Ser	Ser	Glu	Ala
				645					650					655	
Glu	Phe	Gln	Gly	Ala	Val	Glu	Glu	Met	Val	Ser	Thr	Lys	Cys	Pro	Pro
			660					665					670		
Gln	Ile	Ala	Asn	Phe	Glu	Glu	Gly	Phe	Val	Val	Lys	Tyr	Phe	Arg	Asp
		675					680					685			
Tyr	Glu	Thr	Asp	Phe	Asn	Leu	Glu	His	Ile	Asn	Arg	Gly	Gln	Lys	Thr
	690					695					700				

Ala	Glu	Thr	Asp	Ala	Tyr	Cys	Gly	Arg	Tyr	Ser	Leu	Lys	Asn	Pro	Ala
705					710					715					720
Val	Leu	Phe	Asp	Ser	Ala	Asp	Val	Lys	Pro	Asn	Arg	Arg	Pro	Tyr	Gly
				725					730					735	
Asp	Ile	Leu	Leu	Phe	Pro	Tyr	Asn	Gln	Leu	Cys	Leu	Ala	Tyr	Lys	Gly
			740					745					750		
Phe	Leu	Ala	Asn	Tyr	Ile	Gly	Leu	Lys	Phe	Gln	Tyr	Gln	Asp	Asn	Ser
		755					760					765			
Lys	Ile	Thr	Arg	Ser	Thr	Asp	Thr	Gln	Phe	Thr	Tyr	Asn	Phe	Ala	Tyr
	770					775					780				
Gly	Asn	Asn	Trp	Thr	Tyr	Thr	Cys	Ile	Asp	Leu	Leu	Asp	Leu	Val	Arg
785					790					795					800
Thr	Lys	Tyr	Thr	Gly	Thr	Asn	Val	Ser	Leu	Gln	Arg	Ile	Ser	Leu	His
				805					810					815	
Lys	Ala	Ser	Glu	Ser	Gln	Ser	Phe	Tyr	Val	Asp	Val	Val	Tyr	Ile	Gly
	·		820					825					830		
His	Thr	Ser	Thr	Ile	Ser	Thr	Leu	Asp	Glu	Met	Pro	Lys	Arg	Arg	Leu
		835					840					845			
Pro	Ala	Leu	Ala	Asn	Lys	Gly	Ile	Phe	Leu	Glu	His	Phe	Gln	Val	Asn
	850					855					860				
Gln	Thr	Lys	Thr	Asn	Gly	Pro	Thr	Met	Thr	Asn	Gln	Tyr	Ser	Val	Thr
865					870					875					880
Met	Thr	Ser	Tyr	Asn	Cys	Ser	Tyr	Asn	Ile	Pro	Met	Met	Ala	Val	Ser
				885					890					895	
Phe	Gly	Gln	Ile	Ile	Thr	His	Glu	Thr	Glu	Asn	Glu	Phe	Val	Tyr	Arg
			900					905					910		
Gly	Asn	Asn	Trp	Pro	Gly	Glu	Ser	Lys	Ile	His	Thr	Gln	Arg	Ile	Glr
		915					920					925			
Ala	Ala	Ser	Pro	Pro	Leu	Ser	Glv	Ser	Phe	Asp	He	Gln	Ala	Tvr	Glv

	930					935					940				
His	Ile	Leu	Lys	Gly	Lys	Ser	Leu	Ser	Gln	Pro	Thr	Pro	Pro	Pro	Met
945					950					955					960
Pro	Ile	Leu	Ser	Gln	Ser	Glu	Ala	Lys	Asn	Pro	Arg	Ile	Asn	Gln	Leu
				965					970					975	
Ser	Ala	Arg	Trp	Gln	Gln	Val	Trp	Leu	Leu	Ala	Leu	Glu	Arg	Gln	Arg
			980					985					990		
Lys	Leu	Asn	Asp	Ala	Leu	Asp	Arg	Leu	Glu	Glu	Leu	Lys	Glu	Phe	Ala
		995				-	1000				-	1005			
Asn	Phe	Asp	Phe	Asp	Val	Trp	Arg	Lys	Lys	Tyr	Met	Arg	Trp	Met	Asn
]	1010					1015					1020				
His	Lys	Lys	Ser	Arg	Val	Met	Asp	Phe	Phe	Arg	Arg	Ile	Asp	Lys	Asp
1025	5				1030					1035]	1040
Gln	Asp	Gly	Lys	Ile	Thr	Arg	Gln	Glu	Phe	Ile	Asp	Gly	Ile	Leu	Ala
				1045				-	1050				-	1055	
Ser	Lys	Phe	Pro	Thr	Thr	Lys	Leu	Glu	Met	Thr	Ala	Val	Ala	Asp	Ile
			1060]	1065				-	1070		
Phe	Asp	Arg	Asp	Gly	Asp	Gly	Tyr	Ile	Asp	Tyr	Tyr	Glu	Phe	Val	Ala
	-	1075					1080				-	1085			
Ala	Leu	His	Pro	Asn	Lys	Asp	Ala	Tyr	Arg	Pro	Thr	Thr	Asp	Ala	Asp
]	1090				•	1095					1100				
Lys	Ile	Glu	Asp	Glu	Val	Thr	Arg	Gln	Val	Ala	Gln	Cys	Lys	Cys	Ala
1105	5			-	1110					1115					1120
Lys	Arg	Phe	Gln	Val	Glu	Gln	Ile	Gly	Glu	Asn	Lys	Tyr	Arg	Phe	Gly
				1125					1130				-	1135	
Asp	Ser	Gln	Gln	Leu	Arg	Leu	Val	Arg	Ile	Leu	Arg	Ser	Thr	Val	Met
			1140					1145					1150		
Val	Arg	Val	Gly	Gly	Gly	Trp	Met	Ala	Leu	Asp	Glu	Phe	Leu	Val	Lys
		1155					1160					1165			

Asn Asp Pro Cys Arg Ala Arg Gly Arg Thr Asn Ile Glu Leu Arg Glu Lys Phe Ile Leu Pro Glu Gly Ala Ser Gln Gly Met Thr Pro Phe Arg Ser Arg Gly Arg Arg Ser Lys Pro Ser Ser Arg Ala Ala Ser Pro Thr Arg Ser Ser Ser Ser Ala Ser Gln Ser Asn His Ser Cys Thr Ser Met Pro Ser Ser Pro Ala Thr Pro Ala Ser Gly Thr Lys Val Ile Pro Ser Ser Gly Ser Lys Leu Lys Arg Pro Thr Pro Thr Phe His Ser Ser Arg Thr Ser Leu Ala Gly Asp Thr Ser Asn Ser Ser Pro Ala Ser Thr Gly Ala Lys Thr Asn Arg Ala Asp Pro Lys Lys Ser Ala Ser Arg Pro Gly Ser Arg Ala Gly Ser Arg Ala Gly Ser Arg Ala Ser Ser Arg Arg Gly Ser Asp Ala Ser Asp Phe Asp Leu Leu Glu Thr Gln Ser Ala Cys Ser Asp Thr Ser Glu Ser Ser Ala Ala Gly Gly Gln Gly Asn Ser Arg Arg Gly Leu Asn Lys Pro Ser Lys Ile Pro Thr Met Ser Lys Lys Thr Thr Thr Ala Ser Pro Arg Thr Pro Gly Pro Lys Arg

<210> 3803

<211> 211

<212> PRT

<213> Homo sapiens

<400> 3803

Met Cys Ser Leu Pro Arg Gly Phe Glu Pro Gln Ala Pro Glu Asp Leu

1 5 10 15

Ala Gln Arg Ser Leu Val Glu Leu Arg Glu Met Leu Lys Arg Gln Glu
20 25 30

Arg Leu Leu Arg Asn Glu Leu Gln Arg Ile Thr Ile Ala Asp Gln Gly
35 40 45

Glu Gln Gln Ser Glu Glu Asn Ala Ser Thr Lys Asn Leu Thr Gly Leu
50 55 60

Ser Ser Gly Thr Glu Lys Lys Pro His Tyr Met Glu Val Leu Glu Met

65 70 75 80

Arg Ala Lys Asn Pro Val Pro Gln Leu Arg Lys Phe Lys Thr Asn Val 85 90 95

Leu Pro Phe Arg Gln Asn Asp Ser Ser Ser His Cys Gln Lys Ser Gly
100 105 110

Ser Pro Ile Ser Ser Glu Glu Arg Arg Arg Arg Asp Lys Gln His Leu 115 120 125

Asp Asp Ile Thr Ala Ala Arg Leu Leu Pro Leu His His Met Pro Thr
130 135 140

Gln Leu Leu Ser Ile Glu Glu Ser Leu Ala Leu Gln Lys Gln Gln Lys 145 150 155 160

Gln Asn Tyr Glu Glu Met Gln Ala Lys Leu Ala Ala Gln Lys Leu Ala 165 170 175

Glu Arg Leu Asn Ile Lys Met Arg Ser Tyr Asn Pro Glu Gly Glu Ser 180 185 190 Ser Gly Arg Tyr Arg Glu Val Arg Asp Glu Asp Asp Asp Trp Ser Ser
195 200 205
Asp Glu Phe

210

<210> 3804

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3804

Met His Val Leu Arg Pro Ser Leu Phe Leu Ser Met Gly Gln Arg Pro

1 5 10 15

Leu Gly Leu Phe Thr Val Gly Arg Ile Tyr Asn Leu Pro Leu Phe Ser 20 25 30

Val Val Thr Arg Phe Lys Ala Lys His Met Thr Arg Leu Thr Ala Ile
35 40 45

Ser Leu Thr His Thr Pro Val Ile Phe Thr Cys Ile Arg Asn Gly Leu 50 55 60

Ala Pro Ser Ser Thr Pro Ile Ile Cys Thr Cys Ile Ser Asn Glu Leu 65 70 75 80

Ala Val Leu Glu Arg Gln Ser Leu Leu Thr Phe Pro Thr Cys Thr Ser 85 90 95

Pro Arg Leu Phe Asn Lys Glu Ala Gly Gly Arg His Tyr Pro Ile Arg
100 105 110

Ser Phe Ser Arg Leu Val

<210> 3805

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3805

Met Lys Asp Tyr Phe Pro Ile Ser Leu Val Lys Thr Ala Glu Leu Asp 1 5 10 15

Pro Ser Arg Asn Tyr Ile Ala Gly Phe His Pro His Gly Val Leu Ala 20 25 30

Val Gly Ala Phe Ala Asn Leu Cys Thr Glu Ser Thr Gly Phe Ser Ser

35 40 45

Ile Phe Pro Gly Ile Arg Pro His Leu Met Met Leu Thr Leu Trp Phe 50 55 60

Arg Ala Pro Phe Phe Arg Asp Tyr Ile Met Ser Ala Gly Leu Val Thr 65 70 75 80

Ser Glu Lys Glu Ser Ala Ala His Ile Leu Asn Arg Lys Gly Gly
85 90 95

Asn Leu Leu Gly Ile Ile Val Gly Gly Ala Gln Glu Ala Leu Asp Ala 100 105 110

Arg Pro Gly Ser Phe Thr Leu Leu Leu Arg Asn Arg Lys Gly Phe Val
115 120 125

Arg Leu Ala Leu Thr His Gly Ala Pro Leu Val Pro Ile Phe Ser Phe 130 135 140

Gly Glu Asn Asp Leu Phe Asp Gln Ile Pro Asn Ser Ser Gly Ser Trp 145 150 155 160

Leu Arg Tyr Ile Gln Asn Arg Leu Gln Lys Ile Met Gly Ile Ser Leu

165 170 175

Pro Leu Phe His Gly Arg Gly Val Leu Gln Tyr Ser Phe Gly Leu Ile

180

185

190

Pro Tyr Arg Arg Pro Ile Thr Thr Val Val Gly Lys Pro Ile Glu Val

195

200

Cln Lys Thr Leu His Pro Ser Glu Glu Glu Val Asn Gln Leu His Gln

210 215 220

Arg Tyr Ile Lys Glu Leu Cys Asn Leu Phe Glu Ala His Lys Leu Lys 225 230 235 240

Phe Asn Ile Pro Ala Asp Gln His Leu Glu Phe Cys 245 250

<210> 3806

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3806

Met Asp His Thr Leu Leu Trp His Ala Gly His Val Leu Gly Ala Met

1 5 10 15

Ile Ile Thr Leu His Asn Leu Thr Asn Leu Ile Tyr Ala Ala Asp Pro
20 25 30

His Gly Asp Gly Ile Ile Phe Ile Leu Phe Tyr Tyr Leu Phe Ile Phe
35 40 45

Phe Glu Thr Glu Ser Arg Ser Gly Thr Arg Leu Lys Gly Ser Gly Val
50 55 60

Ile Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser Pro 65 70 75 80

Ala Thr Ala Ser Arg Val Ala Gly Thr Thr Arg His Ala Pro Pro Cys

 Pro Ala Asn Phe Cys Ile Phe Ser Thr Asp Gly Val Ser Pro Cys Trp

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<210> 3807

<211> 450

<212> PRT

<213> Homo sapiens

<400> 3807

Met Glu Asp Pro Ser Glu Pro Asp Arg Leu Ala Ser Ala Asp Gly Gly

1 5 10 15

Ser Pro Glu Glu Glu Glu Asp Gly Glu Arg Glu Pro Leu Leu Pro Arg

20 25 30

Ile Ala Trp Ala His Pro Arg Arg Gly Ala Pro Gly Ser Ala Val Arg
35 40 45

Leu Leu Asp Arg Ser Arg Pro Ala Val Ser Val Thr Ile Gly Thr Ser 50 55 60

Glu Met Asn Ala Phe Leu Asp Asp Pro Glu Phe Ala Asp Ile Met Leu
65 70 75 80

Arg Ala Glu Gln Ala Ile Glu Val Gly Ile Phe Pro Glu Arg Ile Ser 85 90 95

Gln Gly Ser Ser Gly Ser Tyr Phe Val Lys Asp Pro Lys Arg Lys Ile 100 105 110

Ile	Gly	Val	Phe	Lys	Pro	Lys	Ser	Glu	Glu	Pro	Tyr	Gly	Gln	Leu	Asn
		115					120					125			
Pro	Lys	Trp	Thr	Lys	Tyr	Val	His	Lys	Val	Cys	Cys	Pro	Cys	Cys	Phe
	130					135					140				
Gly	Arg	Gly	Cys	Leu	Ile	Pro	Asn	Gln	Gly	Tyr	Leu	Ser	Glu	Ala	Gly
145					150					155					160
Ala	Tyr	Leu	Val	Asp	Asn	Lys	Leu	His	Leu	Ser	Ile	Val	Pro	Lys	Thr
				165					170					175	
Lys	Val	Val	Trp	Leu	Val	Ser	Glu	Thr	Phe	Asn	Tyr	Asn	Ala	Ile	Asp
			180					185					190		
Arg	Ala	Lys	Ser	Arg	Gly	Lys	Lys	Tyr	Ala	Leu	Glu	Lys	Val	Pro	Lys
		195					200					205			
Val	Gly	Arg	Lys	Phe	His	Arg	Ile	Gly	Leu	Pro	Pro	Lys	Ile	Gly	Ser
	210					215					220				
Phe	Gln	Leu	Phe	Val	Glu	Gly	Tyr	Lys	Glu	Ala	Glu	Tyr	Trp	Leu	Arg
225					230					235					240
Lys	Phe	Glu	Ala	Asp	Pro	Leu	Pro	Glu	Asn	Ile	Arg	Lys	Gln	Phe	Gln
				245					250					255	
Ser	Gln	Phe	Glu	Arg	Leu	Val	Ile	Leu	Asp	Tyr	Ile	Ile	Arg	Asn	Thr
			260					265					270		
Asp	Arg	Gly	Asn	Asp	Asn	Trp	Leu	Val	Arg	Tyr	Glu	Lys	Gln	Lys	Cys
		275					280					285			
Glu	Lys	Glu	Ile	Asp	His	Lys	Glu	Ser	Lys	Trp	Ile	Asp	Asp	Glu	Glu
	290					295					300				
Phe	Leu	Ile	Lys	Ile	Ala	Ala	Ile	Asp	Asn	Gly	Leu	Ala	Phe	Pro	Phe
305					310					315					320
Lys	His	Pro	Asp	Glu	Trp	Arg	Ala	Tyr	Pro	Phe	His	Trp	Ala	Trp	Leu
				325					330					335	
Pro	Gln	Ala	Lve	Val	Pro	Phe	Ser	Glu	Glu	He	Aro	Asn	Leu	Tle	Leu

Pro Tyr Ile Ser Asp Met Asn Phe Val Gln Asp Leu Cys Glu Asp Leu Tyr Glu Leu Phe Lys Thr Asp Lys Gly Phe Asp Lys Ala Thr Phe Glu Ser Gln Met Ser Val Met Arg Gly Gln Ile Leu Asn Leu Thr Gln Ala Leu Arg Asp Gly Lys Ser Pro Phe Gln Leu Val Gln Ile Pro Cys Val Ile Val Glu Arg Ser Gln Gly Gly Ser Gln Gly Arg Ile Val His Leu Ser Asn Ser Phe Thr Gln Thr Val Asn Cys Arg Lys Pro Phe Phe Ser Ser Trp <210> 3808 <211> 134 <212> PRT <213> Homo sapiens <400> 3808 Met Trp Val Tyr Ser Val Lys Ser Phe Gly Leu Trp Trp Tyr Gln Ala Tyr Arg Ser Pro His Pro Asp Pro Gly Arg Gly Val Asp Trp Ser Arg

Gly Thr Leu Met Gly Pro Gly Arg Asp Asp Arg Arg Ser Val Ser Leu

Pro Phe Ser Leu Lys Phe Pro Ala Ser Met Ala Gly Ser Gln His Glu Leu Arg Pro Leu Gln Glu Ser Leu Pro Phe Cys Ser Arg Pro Pro Pro Arg Cys Gln Ala Gly Ser Thr Asn Gln Lys Arg Ser Trp Ala Gly Ala Ala Val Gln Arg Ala Asn Arg Arg Ala Val Gly Ala Gly Leu Ala Arg Ala Cys Gly Ser Cys Arg Leu Ser Gly Arg His Val Gln Thr Gly Arg Asp Thr Arg Gly Phe Arg <210> 3809 <211> 595 <212> PRT <213> Homo sapiens <400> 3809

Met Met Ala Ala Asp Ile Pro Arg Val Thr Thr Pro Leu Ser Ser Leu Val Gln Val Pro Gln Glu Glu Asp Arg Gln Glu Glu Val Thr Thr Met Ile Leu Glu Asp Asp Ser Trp Val Gln Glu Ala Val Leu Gln Glu Glu Val Thr Arg Gly Pro Gln Gly Ala Leu Gly Arg Leu Arg Glu Leu Cys Arg Arg Trp Leu Arg Pro Glu Val His Thr Lys Glu Gln Met Leu

65					70					75					80
Thr	Met	Leu	Pro	Lys	Glu	Ile	Gln	Ala	Trp	Leu	Gln	Glu	His	Arg	Pro
				85					90					95	
Glu	Ser	Ser	Glu	Glu	Ala	Ala	Ala	Leu	Val	Glu	Asp	Leu	Thr	Gln	Thr
			100					105					110		
Leu	Gln	Asp	Ser	Asp	Phe	Glu	Ile	Gln	Ser	Glu	Asn	Gly	Glu	Asn	Cys
		115					120					125			
Asn	Gln	Asp	Met	Phe	Glu	Asn	Glu	Ser	Arg	Lys	Ile	Phe	Ser	Glu	Met
	130					135					140				
Pro	Glu	Gly	Glu	Ser	Ala	Gln	His	Ser	Asp	Gly	Glu	Ser	Asp	Phe	Glu
145					150					155					160
Arg	Asp	Ala	Gly	Ile	Gln	Arg	Leu	Gln	Gly	His	Thr	Pro	Gly	Glu	Asp
				165					170					175	
His	Gly	Glu	Val	Val	Ser	Gln	Asp	Arg	Glu	Val	Gly	Gln	Leu	Ile	Gly
			180					185					190		
Leu	Gln	Gly	Thr	Tyr	Leu	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Pro	Gln	Cys
		195					200					205			
Gly	Lys	Thr	Phe	Ser	Arg	Lys	Ser	His	Leu	Ile	Thr	His	Glu	Arg	Thr
	210					215					220				
His	Thr	Gly	Glu	Lys	Tyr	Tyr	Lys	Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe
225					230					235					240
Ser	Asp	Gly	Ser	Asn	Phe	Ser	Arg	His	Gln	Thr	Thr	His	Thr	Gly	Glu
				245					250					255	
Lys	Pro	Tyr	Lys	Cys	Arg	Asp	Cys	Gly	Lys	Ser	Phe	Ser	Arg	Ser	Ala
			260					265					270		
Asn	Leu	Ile	Thr	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Gln
		275					280					285			
Cys	Ala	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Arg	Ser	Pro	Asn	Leu	Ile	Ala
	290					295					300				

His	Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ser	Cys	Pro	Glu	Cys
305					310					315					320
Gly	Lys	Ser	Phe	Gly	Asn	Arg	Ser	Ser	Leu	Asn	Thr	His	Gln	Gly	Ile
				325					330					335	
His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Glu	Ser	Phe
			340	·				345					350		
Ser	Tyr	Asn	Ser	Asn	Leu	Ile	Arg	His	Gln	Arg	Ile	His	Thr	Gly	Glu
		355					360					365			
Lys	Pro	Tyr	Lys	Cys	Thr	Asp	Cys	Gly	Gln	Arg	Phe	Ser	Gln	Ser	Ser
	370					375					380				
Ala	Leu	Ile	Thr	His	Arg	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Gln
385					390					395					400
Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Arg	Ser	Ser	Asn	Leu	Ala	Thr
				405					410					415	
His	Arg	Arg	Thr	His	Met	Val	Glu	Lys	Pro	Tyr	Lys	Cys	Gly	Val	Cys
			420					425					430		
Gly	Lys	Ser	Phe	Ser	Gln	Ser	Ser	Ser	Leu	Ile	Ala	His	Gln	Gly	Met
		435					440					445			
His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Leu	Thr	Cys	Gly	Glu	Ser	Phe
	450					455					460				
Ser	Trp	Ser	Ser	Asn	Leu	Leu	Lys	His	Gln	Arg	Ile	His	Thr	Gly	Glu
465					470					475					480
Lys	Pro	Tyr	Lys	Cys	Ser	Glu	Cys	Gly	Lys	Cys	Phe	Ser	Gln	Arg	Ser
				485					490					495	
Gln	Leu	Val	Val	His	Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys
			500					505					510		
Cys	Leu	Met	Cys	Gly	Lys	Ser	Phe	Ser	Arg	Gly	Ser	Ile	Leu	Val	Met
		515					520					525			
His	Gln	Ara	Ala	Hic	Leu	Glv	Asn	Lvs	Pro	Tvr	Arø	Cvs	Pro	Glu	Cvs

540 530 535 Gly Lys Gly Phe Ser Trp Asn Ser Val Leu Ile Ile His Gln Arg Ile 550 555 560 545 His Thr Gly Glu Lys Pro Tyr Lys Cys Pro Glu Cys Gly Lys Gly Phe 570 565 575 Ser Asn Ser Ser Asn Phe Ile Thr His Gln Arg Thr His Met Lys Glu 585 590 580 Lys Leu Tyr 595 <210> 3810 <211> 534 <212> PRT <213> Homo sapiens

<400> 3810

1 5 10 15

Val Gln Cys Glu Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Gln
20 25 30

Ser Gly Arg Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe

Met Glu Leu Gly Leu Ser Trp Ile Phe Leu Val Ala Ile Leu Lys Gly

35 40 45

Asp Asp Phe Ala Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ser Gly Val Thr Trp Lys Gly Asp Ala Leu Gly Tyr Ala
65 70 75 80

Asp Ser Val Lys Gly Arg Phe Ser Leu Thr Arg Asp Ser Ala Arg Lys

85 90 95

Ser	Leu	Ser	Leu	Gln	Met	Asp	Asn	Leu	Arg	Tyr	Asp	Asp	Thr	Ala	Val
			100					105					110		
Tyr	Phe	Cys	Ala	Lys	Glu	Val	Thr	Val	Leu	Trp	Leu	Arg	Gly	Gly	Ser
		115					120					125			
Pro	Thr	Phe	Phe	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val
	130					135					140				
Ser	Ser	Ala	Pro	Thr	Lys	Ala	Pro	Asp	Val	Phe	Pro	Ile	Ile	Ser	Gly
145					150					155					160
Cys	Arg	His	Pro	Lys	Asp	Asn	Ser	Pro	Val	Val	Leu	Ala	Cys	Leu	Ile
				165					170					175	
Thr	Gly	Tyr	His	Pro	Thr	Ser	Val	Thr	Val	Thr	Trp	Tyr	Met	Gly	Thr
			180					185					190		
Gln	Ser	Gln	Pro	Gln	Arg	Thr	Phe	Pro	Glu	Ile	Gln	Arg	Arg	Asp	Ser
		195					200					205			
Tyr	Tyr	Met	Thr	Ser	Ser	Gln	Leu	Ser	Thr	Pro	Leu	Gln	Gln	Trp	Arg
	210					215					220				
Gln	Gly	Glu	Tyr	Lys	Cys	Val	Val	Gln	His	Thr	Ala	Ser	Lys	Ser	Lys
225					230					235					240
Lys	Glu	Ile	Phe	Arg	Trp	Pro	Glu	Ser	Pro	Lys	Ala	Gln	Ala	Ser	Ser
				245					250					255	
Val	Pro	Thr	Ala	Gln	Pro	Gln	Ala	Glu	Gly	Ser	Leu	Ala	Lys	Ala	Thr
			260					265					270		
Thr	Ala	Pro	Ala	Thr	Thr	Arg	Asn	Thr	Gly	Arg	Gly	Gly	Glu	Glu	Lys
		275					280					.285			
Lys	Lys	Glu	Lys	Glu	Lys	Glu	Glu	Gln	Glu	Glu	Arg	Glu	Thr	Lys	Thi
	290					295					300				
Pro	Glu	Cys	Pro	Ser	His	Thr	Gln	Pro	Leu	Gly	Val	Tyr	Leu	Leu	Thi
305	•				310					315					320
Pro	Ala	Val	Gln	Asp	Leu	Trp	Leu	Arg	Asp	Lys	Ala	Thr	Phe	Thr	Cys

				325					330					335	
Phe	Val	Val	Gly	Ser	Asp	Leu	Lys	Asp	Ala	His	Leu	Thr	Trp	Glu	Val
			340					345					350		
Ala	Gly	Lys	Val	Pro	Thr	Gly	Gly	Val	Glu	Glu	Gly	Leu	Leu	Glu	Arg
		355					360					365			
His	Ser	Asn	Gly	Ser	Gln	Ser	Gln	His	Ser	Arg	Leu	Thr	Leu	Pro	Arg
	370					375					380				
Ser	Leu	Trp	Asn	Ala	Gly	Thr	Ser	Ala	Thr	Cys	Thr	Leu	Asn	His	Pro
385					390					395					400
Ser	Leu	Pro	Pro	Gln	Arg	Leu	Met	Ala	Leu	Arg	Glu	Pro	Ala	Ala	Gln
				405					410					415	
Ala	Pro	Val	Lys	Leu	Ser	Leu	Asn	Leu	Leu	Ala	Ser	Ser	Asp	Pro	Pro
			420					425					430		
Glu	Ala	Ala	Ser	Trp	Leu	Leu	Cys	Glu	Val	Ser	Gly	Phe	Ser	Pro	Pro
		435					440					445			
Asn	Ile	Leu	Leu	Met	Trp	Leu	Glu	Asp	Gln	Arg	Glu	Val	Asn	Thr	Ser
	450					455					460				
Gly	Phe	Ala	Pro	Ala	Arg	Pro	Pro	Pro	Gln	Pro	Gly	Ser	Thr	Thr	Phe
465					470					475					480
Trp	Ala	Trp	Ser	Val	Leu	Arg	Val	Pro	Ala	Pro	Pro	Ser	Pro	Gln	Pro
				485					490					495	
Ala	Thr	Tyr	Thr	Cys	Val	Val	Ser	His	Glu	Asp	Ser	Arg	Thr	Leu	Leu
			500					505					510		
Asn	Ala	Ser	Arg	Ser	Leu	Glu	Val	Ser	Cys	Glu	Ser	Pro	Pro	Gly	Pro
		515					520					525			
Gly	Leu	Gly	Arg	Gly	Leu										
	530														

<210> 3811

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3811

Met Gly Gly Thr Glu Val Pro Arg Gly Ser Phe Val Leu Gly Val Gln

1 5 10 15

Leu Lys Ala Val Asp Gly Glu Ala Ile Leu Ser Leu Cys Val Asp Ser

20 25 30

Gly Leu Ser Asp Thr Ser Pro Asp Glu Gly Leu Ile Glu Asp Leu Thr

35 40 45

Ile Glu Asp Lys Ala Val Glu Gln Leu Ala Glu Gly Leu Leu Ser His

50 55 60

Tyr Leu Pro Asp Leu Gln Arg Ser Lys Gln Ala Leu Gln Glu Leu Thr

65 70 75 80

Thr Ala Ala Val Asp Cys Thr Cys Leu Lys Leu Lys Lys Ala Lys Leu

85 90 95

Gln Ile Lys Glu Asp

100

<210> 3812

<211> 938

<212> PRT

<213> Homo sapiens

<400> 3812

Met Thr Cys Leu Ser His Pro Leu Gln Leu Glu Val Thr Ala Asp Leu

Ala Glu Arg Arg Arg Ile Arg Ser Ala Ile Arg Glu Leu Gln Arg Gln Glu Leu Glu Arg Glu Glu Glu Ala Leu Ala Ser Lys Arg Phe Arg Ala Glu Arg Gln Asp Asn Lys Glu Asn Trp Leu His Ser Gln Gln Arg Glu Ala Glu Gln Arg Ala Ala Leu Ala Arg Leu Ala Gly Gln Leu Glu Ser Met Asn Asp Val Glu Glu Leu Thr Ala Leu Leu Arg Ser Ala Gly Glu Tyr Glu Glu Arg Lys Leu Ile Arg Ala Ala Ile Arg Arg Val Arg Ala Gln Glu Ile Glu Ala Ala Thr Leu Ala Gly Arg Leu Tyr Ser Gly Arg Pro Asn Ser Gly Ser Arg Glu Asp Ser Lys Gly Leu Ala Ala His Arg Leu Glu Gln Cys Glu Val Pro Glu Arg Glu Glu Gln Gln Gln Ala Glu Val Ser Lys Pro Ser Pro Thr Pro Glu Gly Thr Ser Gln Asp Val Thr Thr Val Thr Leu Leu Leu Arg Ala Pro Pro Gly Ser Thr Ser Ser Ser Pro Ala Ser Pro Ser Ser Ser Pro Thr Pro Ala Ser Pro Glu Pro Pro Leu Glu Pro Ala Glu Ala Gln Cys Leu Thr Ala Glu Val Pro Gly Ser Pro Glu Pro Pro Pro Ser Pro Pro Lys Thr Thr Ser Pro Glu Pro

Gln	Glu	Ser	Pro	Thr	Leu	Pro	Ser	Thr	Glu	Gly	Gln	Val	Val	Asn	Lys
				245					250					255	
Leu	Leu	Ser	Gly	Pro	Lys	Glu	Thr	Pro	Ala	Ala	Gln	Ser	Pro	Thr	Arg
			260					265					270		
Gly	Pro	Ser	Asp	Thr	Lys	Arg	Ala	Asp	Val	Ala	Gly	Pro	Arg	Pro	Cys
		275					280					285			
Gln	Arg	Ser	Leu	Ser	Val	Leu	Ser	Pro	Arg	Gln	Pro	Ala	Gln	Asn	Arg
	290					295					300				
Glu	Ser	Thr	Pro	Leu	Ala	Ser	Gly	Pro	Ser	Ser	Phe	Gln	Arg	Ala	Gly
305					310					315					320
Ser	Val	Arg	Asp	Arg	Val	His	Lys	Phe	Thr	Ser	Asp	Ser	Pro	Met	Ala
				325					330					335	
Ala	Arg	Leu	Gln	Asp	Gly	Thr	Pro	Gln	Ala	Ala	Leu	Ser	Pro	Leu	Thr
			340					345					350		
Pro	Ala	Arg	Leu	Leu	Gly	Pro	Ser	Leu	Thr	Ser	Thr	Thr	Pro	Ala	Ser
		355					360					365			
Ser	Ser	Ser	Gly	Ser	Ser	Ser	Arg	Gly	Pro	Ser	Asp	Thr	Ser	Ser	Arg
	370					375					380				
Phe	Ser	Lys	Glu	Gln	Arg	Gly	Val	Ala	Gln	Pro	Leu	Ala	Gln	Leu	Arg
385					390					395					400
Ser	Cys	Pro	Gln	Glu	Glu	Gly	Pro	Arg	Gly	Arg	Gly	Leu	Ala	Ala	Arg
				405					410					415	
Pro	Leu	Glu	Asn	Arg	Ala	Gly	Gly	Pro	Val	Ala	Arg	Ser	Glu	Glu	Pro
			420					425					430		
Gly	Ala	Pro	Leu	Pro	Val	Ala	Val	Gly	Thr	Ala	Glu	Pro	Gly	Gly	Ser
		435					440					445			
Met	Lys	Thr	Thr	Phe	Thr	Ile	Glu	Ile	Lys	Asp	Gly	Arg	Gly	Gln	Ala
	450					455					460				
Ser	Thr	Glv	Arg	Val	Leu	Leu	Pro	Thr	G1v	Asn	Gln	Arg	Ala	Glu	Leu

465					470					475					480
Thr	Leu	Gly	Leu	Arg	Ala	Pro	Pro	Thr	Leu	Leu	Ser	Thr	Ser	Ser	Gly
				485					490					495	
Gly	Lys	Ser	Thr	Ile	Thr	Arg	Val	Asn	Ser	Pro	Gly	Thr	Leu	Ala	Arg
			500					505					510		
Leu	Gly	Ser	Val	Thr	His	Val	Thr	Ser	Phe	Ser	His	Ala	Pro	Pro	Ser
		515					520					525			
Ser	Arg	Gly	Gly	Cys	Ser	Ile	Lys	Ala	Ala	Glu	Asp	Ala	Gly	Thr	Pro
	530					535					540				
Val	Ala	His	Pro	Pro	Ala	Phe	Ser	Thr	Arg	Arg	Arg	Ser	Ser	Thr	Gly
545					550					555					560
Thr	Thr	Arg	Ser	Thr	Ser	Leu	Met	Glu	Pro	Glu	Pro	Ala	Glu	Pro	Leu
				565					570					575	
Ala	Ala	Ala	Val	Glu	Ala	Ala	Asn	Gly	Ala	Glu	Gln	Thr	Arg	Val	Asr
			580					585					590		
Lys	Ala	Pro	Glu	Gly	Arg	Ser	Pro	Leu	Ser	Ala	Glu	Glu	Leu	Met	Thr
		595					600					605			
Ile	Glu	Asp	Glu	Gly	Val	Leu	Asp	Lys	Met	Leu	Asp	Gln	Ser	Thr	Asp
	610					615					620				
Phe	Glu	Glu	Arg	Lys	Leu	Ile	Arg	Ala	Ala	Leu	Arg	Glu	Leu	Arg	Glr
625					630					635					640
Arg	Lys	Arg	Asp	Gln	Arg	Asp	Lys	Glu	Arg	Glu	Arg	Arg	Leu	Gln	Glu
				645					650					655	
Ala	Arg	Gly	Arg	Pro	Gly	Glu	Gly	Arg	Gly	Asn	Thr	Ala	Thr	Glu	Thr
			660					665			•		670		
Thr	Thr	Arg	His	Ser	Gln	Arg	Ala	Ala	Asp	Gly	Ser	Ala	Val	Ser	Thr
		675					680					685			
Val	Thr	Lys	Thr	Glu	Arg	Leu	Val	His	Ser	Asn	Asp	Gly	Thr	Arg	Thr
	690					695					700				

Ala	Arg	Thr	Thr	Thr	Val	Glu	Ser	Ser	Phe	Val	Arg	Arg	Ser	Glu	Asn
705					710					715					720
Gly	Ser	Gly	Ser	Thr	Met	Met	Gln	Thr	Lys	Thr	Phe	Ser	Ser	Ser	Ser
				725					730					735	
Ser	Ser	Lys	Lys	Met	Gly	Ser	Ile	Phe	Asp	Arg	Glu	Asp	Gln	Ala	Ser
			740					745					750		
Pro	Arg	Ala	Gly	Ser	Leu	Ala	Ala	Leu	Glu	Lys	Arg	Gln	Ala	Glu	Lys
		755					760					765			
Lys	Lys	Glu	Leu	Met	Lys	Ala	Gln	Ser	Leu	Pro	Lys	Thr	Ser	Ala	Ser
	770					775					780				
Gln	Ala	Arg	Lys	Ala	Met	Ile	Glu	Lys	Leu	Glu	Lys	Glu	Gly	Ala	Ala
785					790					795					800
Gly	Ser	Pro	Gly	Gly	Pro	Arg	Ala	Ala	Val	Gln	Arg	Ser	Thr	Ser	Phe
				805					810					815	
Gly	Val	Pro	Asn	Ala	Asn	Ser	Ile	Lys	Gln	Met	Leu	Leu	Asp	Trp	Cys
			820					825					830		
Arg	Ala	Lys	Thr	Arg	Gly	Tyr	Glu	His	Val	Asp	Ile	Gln	Asn	Phe	Ser
		835					840					845			
Ser	Ser	Trp	Ser	Asp	Gly	Met	Ala	Phe	Cys	Ala	Leu	Val	His	Asn	Phe
	850					855					860				
Phe	Pro	Glu	Ala	Phe	Asp	Tyr	Gly	Gln	Leu	Ser	Pro	Gln	Asn	Arg	Arg
865					870					875					880
Gln	Asn	Phe	Glu	Val	Ala	Phe	Ser	Ser	Ala	Glu	Thr	His	Ala	Asp	Cys
				885					890					895	
Pro	Gln	Leu	Leu	Asp	Thr	Glu	Asp	Met	Val	Arg	Leu	Arg	Glu	Pro	Asp
			900					905					910		
Trp	Lys	Cys	Val	Tyr	Thr	Tyr	Ile	Gln	Glu	Phe	Tyr	Arg	Cys	Leu	Val
		915					920					925			
Gln	Lvs	Glv	Leu	Val	Lvs	Thr	Lvs	Lvs	Ser						

930 935

<210> 3813

<211> 661

<212> PRT

<213> Homo sapiens

<400> 3813

Met Glu Met Thr Glu Met Thr Gly Val Ser Leu Lys Arg Gly Ala Leu

1 5 10 15

Val Val Glu Asp Asn Asp Ser Gly Val Pro Val Glu Glu Thr Lys Lys

20 25 30

Gln Lys Leu Ser Glu Cys Ser Leu Thr Lys Gly Gln Asp Gly Leu Gln

35 40 49

Asn Asp Phe Leu Ser Ile Ser Glu Asp Val Pro Arg Pro Pro Asp Thr

50 55 60

Val Ser Thr Gly Lys Gly Gly Lys Asn Ser Glu Ala Gln Leu Glu Asp

65 70 75 80

Glu Glu Glu Glu Glu Glu Asp Gly Leu Ser Glu Glu Cys Glu Glu Glu

85 90 95

Glu Ser Glu Ser Phe Ala Asp Met Met Lys His Gly Leu Thr Glu Ala

100 105 110

Asp Val Gly Ile Thr Lys Phe Val Ser Ser His Gln Gly Phe Ser Gly

115 120 125

Ile Leu Lys Glu Arg Tyr Ser Asp Phe Val Val His Glu Ile Gly Lys

130 135 140

Asp Gly Arg Ile Ser His Leu Asn Asp Leu Ser Ile Pro Val Asp Glu

145 150 155 160

Glu	Asp	Pro	Ser	Glu	Asp	Ile	Phe	Thr	Val	Leu	Thr	Ala	Glu	Glu	Lys
				165					170					175	
Gln	Arg	Leu	Glu	Glu	Leu	Gln	Leu	Phe	Lys	Asn	Lys	Glu	Thr	Ser	Val
			180					185					190		
Ala	Ile	Glu	Val	Ile	Glu	Asp	Thr	Lys	Glu	Lys	Arg	Thr	Ile	Ile	His
		195					200					205			
Gln	Ala	Ile	Lys	Ser	Leu	Phe	Pro	Gly	Leu	Glu	Thr	Lys	Thr	Glu	Asp
	210					215					220				
Arg	Glu	Gly	Lys	Lys	Tyr	Ile	Val	Ala	Tyr	His	Ala	Ala	Gly	Glu	Lys
225					230					235					240
Ala	Leu	Ala	Asn	Pro	Arg	Lys	His	Ser	Trp	Pro	Lys	Ser	Arg	Gly	Ser
				245					250					255	
Tyr	Cys	His	Phe	Val	Leu	Tyr	Lys	Glu	Asn	Lys	Asp	Thr	Met	Asp	Ala
			260					265					270		
Ile	Asn	Val	Leu	Ser	Lys	Tyr	Leu	Arg	Val	Lys	Pro	Asn	Ile	Phe	Ser
		275					280					285			
Tyr	Met	Gly	Thr	Lys	Asp	Lys	Arg	Ala	Ile	Thr	Val	Gln	Glu	Ile	Ala
	290					295					300				
Val	Leu	Lys	Ile	Thr	Ala	Gln	Arg	Leu	Ala	His	Leu	Asn	Lys	Cys	Leu
305					310					315					320
Met	Asn	Phe	Lys	Leu	Gly	Asn	Phe	Ser	Tyr	Gln	Lys	Asn	Pro	Leu	Lys
				325					330					335	
Leu	Gly	Glu	Leu	Gln	Gly	Asn	His	Phe	Thr	Val	Val	Leu	Arg	Asn	Ile
			340					345					350		
Thr	Gly	Thr	Asp	Asp	Gln	Val	Gln	Gln	Ala	Met	Asn	Ser	Leu	Lys	Glu
		355					360					365			
Ile	Gly	Phe	Ile	Asn	Tyr	Tyr	Gly	Met	Gln	Arg	Phe	Gly	Thr	Thr	Ala
	370					375					380				
Val	Pro	Thr	Tvr	Gln	Val	Glv	Arø	Ala	Ile	Leu	Gln	Asn	Ser	Trp	Thr

385					390					395					400
Glu	Val	Met	Asp	Leu	Ile	Leu	Lys	Pro	Arg	Ser	Gly	Ala	Glu	Lys	Gly
				405					410					415	
Tyr	Leu	Val	Lys	Cys	Arg	Glu	Glu	Trp	Ala	Lys	Thr	Lys	Asp	Pro	Thr
			420					425					430		
Ala	Ala	Leu	Arg	Lys	Leu	Pro	Val	Lys	Arg	Cys	Val	Glu	Gly	Gln	Leu
		435					440					445			
Leu	Arg	Gly	Leu	Ser	Lys	Tyr	Gly	Met	Lys	Asn	Ile	Val	Ser	Ala	Phe
	450					455					460				
Gly	Ile	Ile	Pro	Arg	Asn	Asn	Arg	Leu	Met	Tyr	Ile	His	Ser	Tyr	Gln
465					470					475					480
Ser	Tyr	Val	Trp	Asn	Asn	Met	Val	Ser	Lys	Arg	Ile	Glu	Asp	Tyr	Gly
				485					490					495	
Leu	Lys	Pro	Val	Pro	Gly	Asp	Leu	Val	Leu	Lys	Gly	Ala	Thr	Ala	Thr
			500					505					510		
Tyr	Ile	Glu	Glu	Asp	Asp	Val	Asn	Asn	Tyr	Ser	Ile	His	Asp	Val	Val
		515					520					525			
Met	Pro	Leu	Pro	Gly	Phe	Asp	Val	Ile	Tyr	Pro	Lys	His	Lys	Ile	Gln
	530					535					540				
Glu	Ala	Tyr	Arg	Glu	Met	Leu	Thr	Ala	Asp	Asn	Leu	Asp	Ile	Asp	Asn
545					550					555					560
Met	Arg	His	Lys	Ile	Arg	Asp	Tyr	Ser	Leu	Ser	Gly	Ala	Tyr	Arg	Lys
				565					570					575	
Ile	Ile	Ile	Arg	Pro	Gln	Asn	Val	Ser	Trp	Glu	Val	Val	Ala	Tyr	Asp
			580					585					590		
Asp	Pro	Lys	Ile	Pro	Leu	Phe	Asn	Thr	Asp	Val	Asp	Asn	Leu	Glu	Gly
		595					600					605			
Lys	Thr	Pro	Pro	Val	Phe	Ala	Ser	Glu	Gly	Lys	Tyr	Arg	Ala	Leu	Lys
	610					615					620				

Met Asp Phe Ser Leu Pro Pro Ser Thr Tyr Ala Thr Met Ala Ile Arg
625 630 630 640
Glu Val Leu Lys Met Asp Thr Ser Ile Lys Asn Gln Thr Gln Leu Asn
645 655
Thr Thr Trp Leu Arg
660 660

<210> 3814
<211> 106
<212> PRT

<400> 3814

<213> Homo sapiens

Met Ser Gly Arg Leu Tyr Asn Thr Leu Gly Cys Asn Pro Arg Ser Thr Ser Phe Tyr Leu Cys Ser Ser Lys Gln Ile Thr Ser Ser Leu Phe Ala Leu Val Ser Ser Ser Ile Lys Trp Gly Leu Glu Glu Thr Asp Phe Ile Glu Ser Leu Cys Glu Asn Glu Pro Val Tyr Cys Asn Glu Ser Arg Ile Val Pro Leu Pro Gln Asn Lys Ser Ser Ile Thr Ile Ser Leu Leu Leu Pro Ala Ser Pro Pro Pro Leu Pro Leu Leu Leu Leu Asn Glu

Arg Glu Arg Thr Thr Lys Ile Leu Phe Asn

<210> 3815 <211> 544 <212> PRT <213> Homo sapiens <400> 3815 Met Ala Phe Gln Asp His Pro Glu Lys Ser Glu Gln Phe Glu Glu Leu Gln Ser Ile Leu Lys Lys Gly Lys Leu Thr Phe Glu Asn Ile Met Glu Lys Leu Arg Ile Lys Tyr Ser Glu Met Tyr Thr Ile Val Pro Ala Glu Ile Glu Ser Gln Val Glu Glu Cys Arg Lys Ala Leu Glu Asp Ile Asp Glu Lys Ile Ser Asn Glu Val Leu Lys Ser Ser Pro Ser Tyr Ala Met Arg Arg Lys Ile Glu Glu Ile Asn Asn Gly Leu His Asn Val Glu Lys Met Leu Gln Gln Lys Ser Lys Asn Ile Glu Lys Ala Gln Glu Ile Gln Lys Lys Met Trp Asp Glu Leu Asp Leu Trp His Ser Lys Leu Asn Glu Leu Asp Ser Glu Val Gln Asp Ile Val Glu Gln Asp Pro Gly Gln Ala

Gln Glu Trp Met Asp Asn Leu Met Ile Pro Phe Gln Gln Tyr Gln Gln

Val Ser Gln Arg Ala Glu Cys Arg Thr Ser Gln Leu Asn Lys Ala Thr

Val	Lys	Met	Glu	Glu	Tyr	Ser	Asp	Leu	Leu	Lys	Ser	Thr	Glu	Ala	Trp
			180					185					190		
Ile	Glu	Asn	Thr	Ser	His	Leu	Leu	Ala	Asn	Pro	Ala	Asp	Tyr	Asp	Ser
		195					200					205			
Leu	Arg	Thr	Leu	Ser	His	His	Ala	Ser	Thr	Val	Gln	Met	Ala	Leu	Glu
	210					215					220				
Asp	Ser	Glu	Gln	Lys	His	Asn	Leu	Leu	His	Ser	Ile	Phe	Thr	Asp	Leu
225					230					235					240
Glu	Asp	Leu	Ser	Ile	Ile	Phe	Glu	Thr	Asp	Glu	Leu	Thr	Gln	Ser	Ile
				245					250					255	
Gln	Glu	Leu	Ser	Asn	Gln	Val	Thr	Ala	Leu	Gln	Gln	Lys	Ile	Met	Glu
			260					265					270		
Ser	Leu	Pro	Gln	Ile	Gln	Arg	Met	Ala	Asp	Asp	Val	Val	Ala	Ile	Glu
		275					280					285			
Ser	Glu	Val	Lys	Ser	Met	Glu	Lys	Arg	Val	Ser	Lys	Ile	Lys	Thr	Ile
	290					295					300				
Leu	Leu	Ser	Lys	Glu	Ile	Phe	Asp	Phe	Ser	Pro	Glu	Glu	His	Leu	Lys
305					310					315					320
His	Gly	Glu	Val	Ile	Leu	Glu	Asn	Ile	Arg	Pro	Met	Lys	Lys	Thr	Ile
				325					330					335	
Ala	Glu	Ile	Val	Ser	Tyr	Gln	Val	Glu	Leu	Arg	Leu	Pro	Gln	Thr	Gly
			340					345					350		
Met	Lys	Pro	Leu	Pro	Val	Phe	Gln	Arg	Thr	Asn	Gln	Leu	Leu	Gln	Asp
		355					360					365			
Ile	Lys	Leu	Leu	Glu	Asn	Val	Thr	Gln	Glu	Gln	Asn	Glu	Leu	Leu	Lys
	370					375					380				
Val	Val	Ile	Lys	Gln	Thr	Asn	Glu	Trp	Asp	Glu	Glu	Ile	Glu	Asn	Leu
385					390					395					400
Lys	Gln	Ile	Leu	Asn	Asn	Tyr	Ser	Ala	Gln	Phe	Ser	Leu	Glu	His	Met

Ser Pro Asp Gln Ala Asp Lys Leu Pro Gln Leu Gln Gly Glu Ile Glu Arg Met Glu Lys Gln Ile Leu Ser Leu Asn Gln Arg Lys Glu Asp Leu Leu Val Asp Leu Lys Ala Thr Val Leu Asn Leu His Gln His Leu Lys Gln Glu Gln Glu Gly Val Glu Arg Asp Arg Leu Pro Ala Val Thr Ser Glu Glu Gly Gly Val Ala Glu Arg Asp Ala Ser Glu Arg Lys Leu Asn Arg Arg Gly Ser Met Ser Tyr Leu Ala Ala Val Glu Glu Glu Val Glu Glu Ser Ser Val Lys Ser Asp Val Arg Glu Met Ile Phe Leu Leu Lys Phe Val Arg Thr Arg Ser Leu Lys Glu Val Asn Glu Lys Ile Leu Lys

<210> 3816

<211> 1283

<212> PRT

<213> Homo sapiens

<400> 3816

Met Leu Tyr Lys Lys Phe Ser Leu Lys Phe Val Ser Ala Arg Lys Lys

1 5 10 15

Ala Ala Pro Arg Lys Thr Gly Ala Gln Ala Gly Ile Leu Asp Thr Val

20 25 30

Cys	Asn	Gly	Phe	Gln	Leu	Val	Gln	Val	Phe	Gln	Lys	Glu	Glu	Ile	Glu
		35					40					45			
Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp	Leu	Gly	Gln	Gly	Leu
	50					55					60				
Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln	Gly	Leu	Glu	His	Asp
65					70					75					80
Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu	Asn	Lys	Lys	Val	Ala
				85					90					95	
Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Arg	Ph€
			100					105					110		
Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met	Val	Asp	Thr	Glu	Glu
		115					120					125			
Leu	Val	Ala	Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Phe	Lys	Val	Val	Lys
	130					135					140				
Ala	Gln	Ile	Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg
145					150					155					160
Lys	Ser	Thr	Val	Glu	Val	Ile	Lys	Arg	Glu	Gly	Glu	Lys	Ile	Ala	Thr
				165					170					175	
Thr	Ala	Glu	Pro	Ala	Asp	Lys	Val	Lys	Ile	Leu	Lys	Gln	Leu	Ser	Leu
			180					185					190		
Leu	Asp	Ser	Arg	Trp	Glu	Ala	Leu	Leu	Asn	Lys	Ala	Glu	Thr	Arg	Asr
		195					200					205			
Arg	Gln	Leu	Glu	Gly	Ile	Ser	Val	Val	Ala	Gln	Gln	Phe	His	Glu	Thr
	210					215					220				
Leu	Glu	Pro	Leu	Asn	Glu	Trp	Leu	Thr	Thr	Ile	Glu	Lys	Arg	Leu	Val
225					230					235					240
Asn	Cys	Glu	Pro	Ile	Gly	Thr	Gln	Ala	Ser	Lys	Leu	Glu	Glu	Gln	Πle
				245					250					255	
Ala	Gln	His	Lys	Ala	Leu	Glu	Asp	Asp	Ile	Ile	Asn	His	Asn	Lys	His

			260					265					270		
Leu	His	Gln	Ala	Val	Ser	Ile	Gly	Gln	Ser	Leu	Lys	Val	Leu	Ser	Ser
		275					280					285			
Arg	Glu	Asp	Lys	Asp	Met	Val	Gln	Ser	Lys	Leu	Asp	Phe	Ser	Gln	Val
	290					295					300				
Trp	Tyr	Ile	Glu	Ile	Gln	Glu	Lys	Ser	His	Ser	Arg	Ser	Glu	Leu	Leu
305					310					315					320
Gln	Gln	Ala	Leu	Cys	Asn	Ala	Lys	Ile	Phe	Gly	Glu	Asp	Glu	Val	Glu
				325					330					335	
Leu	Met	Asn	Trp	Leu	Asn	Glu	Val	His	Asp	Lys	Leu	Ser	Lys	Leu	Ser
			340					345					350		
Val	Gln	Asp	Tyr	Ser	Thr	Glu	Gly	Leu	Trp	Lys	Gln	Gln	Ser	Glu	Leu
		355					360					365			
Arg	Val	Leu	Gln	Glu	Asp	Ile	Leu	Leu	Arg	Lys	Gln	Asn	Val	Asp	Gln
	370					375					380				
Ala	Leu	Leu	Asn	Gly	Leu	Glu	Leu	Leu	Lys	Gln	Thr	Thr	Gly	Asp	Glu
385					390					395					400
Val	Leu	Ile	Ile	Gln	Asp	Lys	Leu	Glu	Ala	Ile	Lys	Ala	Arg	Tyr	Lys
				405					410					415	
Asp	Ile	Thr	Lys	Leu	Ser	Thr	Asp	Val	Ala	Lys	Thr	Leu	Glu	Gln	Ala
			420					425					430		
Leu	Gln	Leu	Ala	Arg	Arg	Leu	His	Ser	Thr	His	Glu	Glu	Leu	Cys	Thr
		435					440					445			
Trp	Leu	Asp	Lys	Val	Glu	Val	Glu	Leu	Leu	Ser	Tyr	Glu	Thr	Gln	Val
	450					455					460	-			
Leu	Lys	Gly	Glu	Glu	Ala	Ser	Gln	Ala	Gln	Met	Arg	Pro	Lys	Glu	Leu
465					470					475					480
Lys	Lys	Glu	Ala	Lys	Asn	Asn	Lys	Ala	Leu	Leu	Asp	Ser	Leu	Asn	Glu
				185					490					495	

Val	Ser	Ser	Ala	Leu	Leu	Glu	Leu	Val	Pro	Trp	Arg	Ala	Arg	Glu	Gly
			500					505					510		
Leu	Glu	Lys	Met	Val	Ala	Glu	Asp	Asn	Glu	Arg	Tyr	Arg	Leu	Val	Ser
		515					520					525			
Asp	Thr	Ile	Thr	Gln	Lys	Val	Glu	Glu	Ile	Asp	Ala	Ala	Ile	Leu	Arg
	530					535					540				
Ser	Gln	Gln	Phe	Asp	Gln	Ala	Ala	Asp	Ala	Glu	Leu	Ser	Trp	Ile	Thr
545					550					555			٠		560
Glu	Thr	Glu	Lys	Lys	Leu	Met	Ser	Leu	Gly	Asp	Ile	Arg	Leu	Glu	Gln
				565					570					575	
Asp	Gln	Thr	Ser	Ala	Gln	Leu	Gln	Val	Gln	Lys	Thr	Phe	Thr	Met	Glu
			580					585					590		
Ile	Leu	Arg	His	Lys	Asp	Ile	Ile	Asp	Asp	Leu	Val	Lys	Ser	Gly	His
		595					600					605			
Lys	Ile	Met	Thr	Ala	Cys	Ser	Glu	Glu	Glu	Lys	Gln	Ser	Met	Lys	Lys
	610					615					620				
Lys	Leu	Asp	Lys	Val	Leu	Lys	Asn	Tyr	Asp	Thr	Ile	Cys	Gln	Ile	Asn
625					630					635					640
Ser	Glu	Arg	Tyr	Leu	Gln	Leu	Glu	Arg	Ala	Gln	Ser	Leu	Val	Asn	Gln
				645					650					655	
Phe	Trp	Glu	Thr	Tyr	Glu	Glu	Leu	Trp	Pro	Trp	Leu	Thr	Glu	Thr	Gln
			660					665					670		
Ser	Ile	Ile	Ser	Gln	Leu	Pro	Ala	Pro	Ala	Leu	Glu	Tyr	Glu	Thr	Leu
		675					680					685			
Arg	Gln	Gln	Gln	Glu	Glu	His	Arg	Gln	Leu	Arg	Glu	Leu	Ile	Ala	Glu
	690					695					700				
His	Lys	Pro	His	Ile	Asp	Lys	Met	Asn	Lys	Thr	Gly	Pro	Gln	Leu	Leu
705					710					715				-	720
Glu	Leu	Ser	Pro	Gly	Glu	Gly	Phe	Ser	Ile	Gln	Glu	Lys	Tyr	Val	Ala

				725					730					735	
Ala	Asp	Thr	Leu	Tyr	Ser	Gln	Ile	Lys	Glu	Asp	Val	Lys	Lys	Arg	Ala
			740					745					750		
Val	Ala	Leu	Asp	Glu	Ala	Ile	Ser	Gln	Ser	Thr	Gln	Phe	His	Asp	Lys
		755					760					765			
Ile	Asp	Gln	Ile	Leu	Glu	Ser	Leu	Glu	Arg	Ile	Val	Glu	Arg	Leu	Arg
	770					775					780				
Gln	Pro	Pro	Ser	Ile	Ser	Ala	Glu	Val	Glu	Lys	Ile	Lys	Glu	Gln	Ile
785					790					795					800
Ser	Glu	Asn	Lys	Asn	Val	Ser	Val	Asp	Met	Glu	Lys	Leu	Gln	Pro	Leu
				805					810					815	
Tyr	Glu	Thr	Leu	Lys	Gln	Arg	Gly	Glu	Glu	Met	Ile	Ala	Arg	Ser	Gly
			820					825					830		
Gly	Thr	Asp	Lys	Asp	Ile	Ser	Ala	Lys	Ala	Val	Gln	Asp	Lys	Leu	Asn
		835					840					845			
Gln	Met	Val	Phe	Ile	Trp	Glu	Asn	Ile	His	Thr	Leu	Val	Glu	Glu	Arg
	850					855					860				
Glu	Ala	Lys	Leu	Leu	Asp	Val	Met	Glu	Leu	Ala	Glu	Lys	Phe	Trp	Cys
865					870					875					880
Asp	His	Met	Ser	Leu	Ile	Val	Thr	Ile	Lys	Asp	Thr	Gln	Asp	Phe	Ile
				885					890					895	
Arg	Asp	Leu	Glu	Asp	Pro	Gly	Ile	Asp	Pro	Ser	Val	Val	Lys	Gln	Gln
			900					905					910		
Gln	Glu	Ala	Ala	Glu	Thr	Ile	Arg	Glu	Glu	Ile	Asp	Gly	Leu	Gln	Glu
		915					920					925			
Glu	Leu	Asp	Ile	Val	Ile	Asn	Leu	Gly	Ser	Glu	Leu	Ile	Ala	Ala	Cys
	930					935					940				
Gly	Glu	Pro	Asp	Lys	Pro	Ile	Val	Lys	Lys	Ser	Ile	Asp	Glu	Leu	Asn
945					950					955					960

Lys	Asp	Tle	Arg	Asp	Lys		Ala	Lys	Asn	Leu		Asp	Trp	Ala	Ser
	975					970					965				
Gln	Leu	Gly	Asp	Gln	Tyr	Gln		Ala	Ala	Gln	Met	Ala	Glu	Glu	Leu
		990					985					980			
Met	Ser	Ala	Leu	Lys	Gly	Gly	Ala	Ile	Asp	Val	Trp	Asp	Phe	Val	Ala
			1005]				1000	J				995		
Glu	Glu	Ile	Gln	Gln	Lys	Val	Thr	Glu	Leu	Asp	Thr	Gly	Ile	Pro	Ser
				1020					1015	-				1010	
Glu	Met	Glu	Ile	Gln	Gln	Gln	Tyr	Ala	Glu	Ser	Lys	Phe	Gln	Lys	Leu
1040					1035]				1030				5	102
Glu	Glu	Thr	Val	Lys	Lys	Leu	Leu	Leu	Glu	Ala	Gln	His	Asn	Leu	Arg
	1055	-				1050					1045	-			
Ile	Leu	Lys	Leu	Glu	Met	Leu	Pro	Asp	Gln	Val	Thr	His	Lys	Asp	Ser
		1070					1065					1060			
Glu	Leu	Lys	His	Gln	Arg	Asn	Ile	Ile	Arg	Glu	Glu	Leu	Ser	Asp	Trp
			1085					1080					1075		
Leu	Glu	Asp	Leu	Ala	His	Gln	Phe	Gln	Gly	Leu	Ala	Leu	Leu	Ala	Gly
				1100					1095					1090	
Pro	Lys	Gln	Glu	Ser	Leu	Leu	Gly	Glu	Thr	His	Thr	Leu	Trp	Ala	Leu
1120	-				1115					1110				5	110
His	His	Lys	Ala	Leu	Glu	Ile	Glu	Ile	Ala	Lys	Pro	Asp	Gly	Gly	Val
	1135					1130					1125				
Val	Ala	Glu	Val	Thr	Ser	Gln	His	Ala	Leu	Val	Asp	Asn	Gln	Leu	Val
		1150					1145					1140			
Ala	Glu	Glu	Gly	Ala	Ser	Ser	Glu	Ile	Leu	Asp	Asn	Gly	Ala	Lys	Asn
			1165					1160					1155		
Asn	Gln	Trp	Arg	Gln	Asn	Leu	Val	Glu	Leu	Lys	Asn	Gln	Leu	Asn	Ser
				1180					1175					1170	
Leu	Ala	Glv	Asp	Leu	Gln	Gln	Lvs	Arg	Gln	Glu	Thr	Lvs	Glu	Leu	Val

1195 1185 1190 1200 Arg Gln Ala Lys Gly Phe His Gly Glu Ile Glu Asp Leu Gln Gln Trp 1205 1210 1215 Leu Thr Asp Thr Glu Arg His Leu Leu Ala Ser Lys Pro Leu Gly Gly 1225 1230 1220 Leu Pro Glu Thr Ala Lys Glu Gln Leu Asn Val His Met Glu Val Cys 1235 1240 1245 Ala Ala Phe Glu Ala Lys Glu Glu Thr Tyr Lys Ser Leu Met Gln Lys 1250 1255 1260 Gly Gln Gln Met Leu Ala Arg Cys Pro Lys Ser Ala Glu Thr Asn Ile 1280 1265 1270 1275

<210> 3817

Asp Gln Asp

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3817

Met Ile Ser Phe His Val Ile Phe Leu Ser Leu Gly Arg Gly Lys Leu

1 5 10 15

Phe Leu Pro Val Asn Phe Cys Phe Leu Lys Leu Lys Asn Ser Gln Val
20 25 30

Arg Ile Pro Lys Asp Phe Thr Cys Asn Leu His Val Leu Phe Arg Thr
35 40 45

Val Gln Gly Glu Asp Arg Asn Thr Met Phe Arg Gly His Trp Ser Ile
50 55 60

Tyr Ser Arg Asn Phe Pro Leu Ala Val Val Pro Ala Tyr Val Thr Glu 70 75 80 65 Asp Gly Lys Asn Thr Ser His Arg Ala Ser Gly Gln Phe Cys Asn Ala 90 85 95 Leu Ser Gln Gly Glu Ile Pro Ser Ser Leu Gln Leu Val Asn Ser Tyr 100 105 110 Ala Leu Glu Pro Arg Thr Asp Met Pro Cys Asn Phe Leu Thr 115 120 125

<210> 3818

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3818

Met Glu Asn Pro Lys Glu Ser Thr His Lys Lys Thr Thr Arg Ala Asn

1 5 10 15

Lys Phe Gly Lys Val Ala Arg Tyr Lys Ile Gly Ile Gln Ile Ala Val 20 25 30

Ala Arg Thr Ser Ser Arg Met Leu Thr Ile Ser Ser Asp Ser Gly Tyr
35 40 45

Ser Cys Pro Ser Ser Ile Ser Gly Val Val Gly Val Ala Cys Gly Glu
50 55 60

Leu Ser Ile Phe Thr Met Lys Phe Asp Gly Cys Tyr Arg Ile Phe Asn 65 70 75 80

Val Leu Ile Asn Ile Tyr Ser Gln Ala Val Lys Lys Ile Phe Leu Ile 85 90 95

Thr Asn Lys Val Lys Phe Leu Ser Asn Thr Tyr Ser Ala Pro Phe Glu

100 105 110

Ile Ile Leu Phe Phe Ser Phe Ile Leu Trp Met
115 120

<210> 3819

<211> 538

<212> PRT

<213> Homo sapiens

<400> 3819

Met Glu Leu Gly Leu Arg Trp Val Leu Leu Val Ala Ile Leu Glu Gly

1 5 10 15

Val His Cys Asp Val Gln Leu Met Glu Ser Gly Gly Leu Val Lys

20 25 30

Ala Gly Gly Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Phe Thr Ile

35 40 45

Ser Ser Tyr Ser Met Leu Trp Val Arg Gln Ser Pro Gly Lys Gly Leu

50 55 60

Glu Trp Leu Ser Ser Ile Ser Glu Gly Gly Gly Arg Ile Leu Tyr Thr

65 70 75 80

Asp Ser Val Lys Asp Arg Phe Ile Val Ser Arg Asp Asn Ala Arg Gln

85 90 95

Ser Phe Phe Leu Gln Met Asn Asn Leu Arg Val Asp Asp Thr Ala Val

100 105 110

Tyr Phe Cys Ala Arg Glu Arg Thr His Phe Asp Phe Trp Ser Asp Tyr

115 120 125

Ser Asn Asp Tyr Phe Ser Phe Asn Met Asp Val Trp Gly Arg Gly Ala

130 135 140

Thr	Val	Thr	Val	Ser	Ser	Ala	Pro	Thr	Lys	Ala	Pro	Asp	Val	Phe	Pro
145					150					155					160
Ile	Ile	Ser	Gly	Cys	Arg	His	Pro	Lys	Asp	Asn	Ser	Pro	Val	Val	Leu
				165					170					175	
Ala	Cys	Leu	Ile	Thr	Gly	Tyr	His	Pro	Thr	Ser	Val	Thr	Val	Thr	Trp
			180					185					190		
Tyr	Met	Gly	Thr	Gln	Ser	Gln	Pro	Gln	Arg	Thr	Phe	Pro	Glu	Ile	Gln
		195					200					205			
Arg	Arg	Asp	Ser	Tyr	Tyr	Met	Thr	Ser	Ser	Gln	Leu	Ser	Thr	Pro	Leu
	210					215					220				
Gln	Gln	Trp	Arg	Gln	Gly	Glu	Tyr	Lys	Cys	Val	Val	Gln	His	Thr	Ala
225					230					235					240
Ser	Lys	Ser	Lys	Lys	Glu	Ile	Phe	Arg	Trp	Pro	Glu	Ser	Pro	Lys	Ala
				245					250					255	
Gln	Ala	Ser	Ser	Val	Pro	Thr	Ala	Gln	Pro	Gln	Ala	Glu	Gly	Ser	Leu
			260					265					270		
Ala	Lys	Ala	Thr	Thr	Ala	Pro	Ala	Thr	Thr	Arg	Asn	Thr	Gly	Arg	Gly
		275					280					285			
Gly	Glu	Glu	Lys	Lys	Lys	Glu	Lys	Glu	Lys	Glu	Glu	Gln	Glu	Glu	Arg
	290					295					300				
Glu	Thr	Lys	Thr	Pro	Glu	Cys	Pro	Ser	His	Thr	Gln	Pro	Leu	Gly	Val
305					310					315					320
Tyr	Leu	Leu	Thr	Pro	Ala	Val	Gln	Asp	Leu	Trp	Leu	Arg	Asp	Lys	Ala
				325					330					335	
Thr	Phe	Thr	Cys	Phe	Val	Val	Gly	Ser	Asp	Leu	Lys	Asp	Ala	His	Leu
			340					345					350		
Thr	Trp	Glu	Val	Ala	Gly	Lys	Val	Pro	Thr	Gly	Gly	Val	Glu	Glu	Gly
		355					360					365			
Leu	Leu	Glu	Arg	His	Ser	Asn	Glv	Ser	Gln	Ser	Gln	His	Ser	Arg	Leu

370 375 380

Thr Leu Pro Arg Ser Leu Trp Asn Ala Gly Thr Ser Val Thr Cys Thr

385 390 395 400

Leu Asn His Pro Ser Leu Pro Pro Gln Arg Leu Met Ala Leu Arg Glu
405 410 415

Pro Ala Ala Gln Ala Pro Val Lys Leu Ser Leu Asn Leu Leu Ala Ser 420 425 430

Ser Asp Pro Pro Glu Ala Ala Ser Trp Leu Leu Cys Glu Val Ser Gly
435
440
445

Phe Ser Pro Pro Asn Ile Leu Leu Met Trp Leu Glu Asp Gln Arg Glu
450 455 460

Val Asn Thr Ser Gly Phe Ala Pro Ala Arg Pro Pro Pro Gln Pro Arg 465 470 475 480

Ser Thr Thr Phe Trp Ala Trp Ser Val Leu Arg Val Pro Ala Pro Pro 485 490 495

Ser Pro Gln Pro Ala Thr Tyr Thr Cys Val Val Ser His Glu Asp Ser 500 505 510

Arg Thr Leu Leu Asn Ala Ser Arg Ser Leu Glu Val Ser Cys Glu Ser 515 520 525

Pro Pro Gly Pro Gly Leu Gly Arg Gly Leu 530 535

<210> 3820

<211> 1042

<212> PRT

<213> Homo sapiens

<400> 3820

Met	Asn	Leu	His	Leu	Pro	Ser	Leu	Pro	Phe	Thr	Asn	Gly	Ser	Ser	Ser
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Phe	Phe	Glu	Asp	Phe	Gln	Glu	Tyr	Cys	Asn	Ser	Asn	Glu	Trp	Gln	Val
			20					25					30		
Tyr	Ile	Glu	Lys	Tyr	Ile	Val	Pro	Tyr	Met	Lys	Gln	Tyr	Glu	Ala	His
		35					40					45			
Thr	Phe	Tyr	Asp	Gly	His	Glu	Asn	Met	Ala	Leu	Tyr	Trp	Lys	Asp	Cys
	50					55					60				
Tyr	Glu	Ala	Leu	Met	Val	Asn	Met	His	Lys	Arg	Asp	Arg	Glu	Gly	Gly
65					70					75					80
Glu	Ser	Lys	Leu	Lys	Phe	Gln	Glu	Leu	Phe	Val	Glu	Pro	Phe	Asn	Arg
				85					90					95	
Lys	Ala	Arg	Gln	Glu	Asn	Leu	Arg	Tyr	Asn	Asn	Met	Leu	Lys	Gln	Leu
			100					105					110		
Ser	Ser	Gln	Gln	Leu	Ala	Thr	Leu	Arg	Arg	Trp	Lys	Ala	Ile	Gln	Leu
		115					120					125			
Tyr	Leu	Thr	Cys	Glu	Arg	Gly	Pro	Trp	Ala	Lys	Arg	Lys	Gln	Asn	Pro
	130					135					140				
Ile	His	Trp	Lys	Leu	Ala	Asn	Val	Glu	Asn	Tyr	Ser	Arg	Met	Arg	Leu
145					150					155					160
Lys	Leu	Val	Pro	Asn	Tyr	Asn	Phe	Lys	Thr	His	Glu	Glu	Ala	Ser	Ala
				165					170					175	
Leu	Arg	Asp	Asn	Leu	Gly	Ile	Gln	His	Ser	Gln	Pro	Ser	Ser	Asp	Thr
			180					185					190		
Leu	Leu	Leu	Glu	Val	Val	Lys	Gln	Val	Lys	Val	Ser	Asp	Met	Val	Ģlu
		195					200					205			
Asp	Lys	Leu	Asp	Leu	Pro	Glu	Glu	Asp	Ile	Thr	Ala	Arg	Val	Asn	Val
	210					215					220				
Asp	Glu	Lys	Glu	Glu	Gln	Asp	Gln	Lys	Glu	Lys	Leu	Val	Leu	Met	Glu

225					230					235					240
Asp	Cys	Glu	Leu	Ile	Thr	Ile	Ile	Asp	Val	Ile	Pro	Gly	Arg	Leu	Glu
				245					250					255	
Ile	Thr	Thr	Gln	His	Ile	Tyr	Phe	Tyr	Asp	Gly	Ser	Ile	Glu	Lys	Glu
			260					265					270		
Asp	Gly	Val	Gly	Phe	Asp	Phe	Lys	Trp	Pro	His	Ser	Gln	Ile	Arg	Glu
		275					280					285			
Ile	His	Leu	Arg	Arg	Tyr	Asn	Leu	Arg	Arg	Ser	Ala	Leu	Glu	Ile	Phe
	290					295					300				
His	Val	Asp	Gln	Ser	Asn	Tyr	Phe	Leu	Asn	Phe	Lys	Lys	Glu	Val	Arg
305					310					315					320
Asn	Lys	Ile	Tyr	Ser	Arg	Leu	Leu	Ser	Leu	His	Ser	Pro	Asn	Ser	Tyr
				325					330					335	
Tyr	Gly	Ser	Arg	Ser	Pro	Gln	Glu	Leu	Phe	Lys	Ala	Ser	Gly	Leu	Thr
			340					345					350		
Gln	Lys	Trp	Val	Asn	Arg	Glu	Ile	Ser	Asn	Phe	Asp	Tyr	Leu	Ile	Gln
		355					360					365			
Ile	Asn	Thr	Met	Ala	Gly	Arg	Thr	Tyr	Asn	Asp	Leu	Ala	Gln	Tyr	Pro
	370					375					380				
Val	Phe	Pro	Trp	Ile	Leu	Gln	Asp	Tyr	Thr	Ser	Glu	Glu	Leu	Asp	Leu
385					390					395					400
Asn	Asn	Pro	Ala	Val	Phe	Arg	Asp	Leu	Ser	Lys	Pro	Ile	Gly	Val	Val
				405					410					415	
Asn	Glu	Lys	Asn	Ala	Lys	Ala	Met	Arg	Glu	Lys	Tyr	Glu	Asn	Phe	Glu
			420					425					430		
Asp	Pro	Met	Gly	Thr	Ile	Asp	Lys	Phe	His	Tyr	Gly	Thr	His	Tyr	Ser
		435					440					445			
Asn	Ser	Ala	Gly	Val	Met	His	Tyr	Leu	Ile	Arg	Val	Glu	Pro	Phe	Thr
	450					455					460				

Thr	Leu	His	Ile	Gln	Leu	Gln	Ser	Gly	Arg	Phe	Asp	Cys	Ala	Asp	Arg
465					470					475					480
Gln	Phe	His	Ser	Ile	Pro	Ala	Thr	Trp	Gln	Ala	Leu	Met	Asp	Asn	Pro
				485					490					495	
Tyr	Asp	Val	Lys	Glu	Leu	Ile	Pro	Glu	Phe	Phe	Tyr	Phe	Pro	Glu	Phe
			500					505					510		
Leu	Glu	Asn	Gln	Asn	Gln	Phe	Asn	Leu	Gly	Arg	Leu	Gln	Ile	Ser	Lys
		515					520					525			
Glu	Leu	Val	Asn	Asp	Val	Ile	Leu	Pro	Lys	Trp	Ala	Lys	Ser	Ala	Glu
	530					535					540				
Asp	Phe	Ile	Tyr	Lys	His	Arg	Lys	Ala	Leu	Glu	Ser	Glu	Tyr	Val	Ser
545					550					555					560
Ala	His	Leu	His	Glu	Trp	Ile	Asp	Leu	Ile	Phe	Gly	Tyr	Lys	Gln	Arg
				565					570					575	
Gly	Pro	Ala	Ala	Val	Glu	Ala	Leu	Asn	Val	Phe	Tyr	Tyr	Cys	Ser	Tyr
			580					585					590		
Glu	Gly	Ala	Val	Asp	Leu	Asp	Ala	Leu	Thr	Asp	Glu	Lys	Glu	Arg	Lys
		595					600.					605			
Ala	Leu	Glu	Gly	Met	Ile	Asn	Asn	Phe	Gly	Gln	Thr	Pro	Cys	Gln	Leu
	610					615					620				
Leu	Lys	Glu	Pro	His	Pro	Pro	Arg	Leu	Ser	Ala	Glu	Glu	Ala	Val	Glr
625					630					635					640
Lys	Pro	Thr	Lys	Ile	Asp	Thr	Ser	Thr	Leu	Asn	Leu	Phe	Gln	His	Leu
				645					650					655	
Pro	Glu	Leu	Lys	Ser	Phe	Phe	Ile	Glu	Gly	Ile	Ser	Asp	Gly	Ile	Pro
			660					665					670		
Leu	Leu	Lys	Ala	Thr	Val	Pro	Lys	Asn	Gln	Tyr	Arg	Ser	Phe	Met	Ser
		675					680					685			
Gln	Glv	Ser	Pro	Glu	Leu	Leu	He	Thr	He	Ser	Met	Asn	Tvr	Val	Πle

	690					695					700				
Gly	Thr	His	Gly	Trp	Leu	Pro	Tyr	Asp	Arg	Asn	Ile	Ser	Asn	Tyr	Phe
705					710					715					720
Thr	Phe	Ile	Lys	Asp	Gln	Thr	Val	Thr	Asn	Pro	Lys	Thr	Gln	Arg	Ser
				725					730					735	
Ile	Asn	Gly	Ser	Phe	Ala	Pro	Gly	Leu	Glu	Ile	Thr	Ser	Lys	Leu	Phe
			740					745					750		
Val	Val	Ser	His	Asp	Ala	Lys	Leu	Leu	Phe	Ser	Ala	Gly	Tyr	Trp	Asp
		755					760					765			
Asn	Ser	Ile	Gln	Val	Met	Ser	Leu	Thr	Lys	Gly	Lys	Ile	Ile	Ser	His
	770					775					780				
Ile	Ile	Arg	His	Met	Asp	Ile	Val	Thr	Cys	Leu	Ala	Thr	Asp	Tyr	Cys
785					790					795					800
Gly	Ile	His	Leu	Ile	Ser	Gly	Ser	Aŗg	Asp	Thr	Thr	Cys	Met	Ile	Trp
				805					810					815	
Gln	Ile	Thr	Gln	Gln	Gly	Gly	Val	Pro	Val	Gly	Leu	Ala	Ser	Lys	Pro
			820					825					830		
Phe	Gln	Ile	Leu	Tyr	Gly	His	Thr	Asn	Glu	Val	Leu	Ser	Val	Gly	Ιlϵ
		835					840					845			
Ser	Thr	Glu	Leu	Asp	Met	Ala	Val	Ser	Gly	Ser	Arg	Asp	Gly	Thr	Val
	850					855					860				
Ile	Ile	His	Thr	Ile	Gln	Lys	Gly	Gln	Tyr	Met	Arg	Thr	Leu	Arg	Pro
865					870					875					880
Pro	Cys	Glu	Ser	Ser	Leu	Phe	Leu	Thr	Ile	Pro	Asn	Leu	Ala	Ile	Ser
				885					890					895	
Trp	Glu	Gly	His	Ile	Val	Val	Tyr	Ser	Ser	Thr	Glu	Glu	Lys	Thr	Thi
			900					905					910		
Leu	Lys	Asp	Lys	Asn	Ala	Leu	His	Leu	Phe	Ser	Ile	Asn	Gly	Lys	Туі
		915					920					925			

Leu Gly Ser Gln Ile Leu Lys Glu Gln Val Ser Asp Ile Cys Ile Ile 935 940 930 Gly Glu His Ile Val Thr Gly Ser Ile Gln Gly Phe Leu Ser Ile Arg 955 960 950 945 Asp Leu His Ser Leu Asn Leu Ser Ile Asn Pro Leu Ala Met Arg Leu 975 965 970 Pro Ile His Cys Val Cys Val Thr Lys Glu Tyr Ser His Ile Leu Val 985 990 980 Gly Leu Glu Asp Gly Lys Leu Ile Val Val Gly Val Gly Lys Pro Ala 995 1000 1005 Glu Met Arg Ser Gly Gln Leu Ser Arg Lys Phe Trp Gly Ser Ser Lys 1020 1010 1015 Arg Leu Ser Gln Ile Ser Ala Gly Glu Thr Glu Tyr Asn Thr Gln Asp 1025 1030 1035 1040 Ser Lys

<210> 3821

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3821

Met Ala Asn Arg Leu Phe Gly Glu Lys Ser Cys Asp Phe Leu Ser Ser

1 5 10 15

Phe Arg Asp Ser Cys Gln Lys Phe Tyr Gln Ala Glu Met Glu Glu Leu 20 25 30

Asp Phe Ile Ser Ala Val Glu Lys Ser Arg Lys His Ile Asn Thr Trp

		35					40					45			
Val	Ala	Glu	Lys	Thr	Glu	Gly	Lys	Ile	Ala	Glu	Leu	Leu	Ser	Pro	Gly
	50					55					60				
Ser	Val	Asp	Pro	Leu	Thr	Arg	Leu	Val	Leu	Val	Asn	Ala	Val	Tyr	Phe
65					70					75					80
Arg	Gly	Asn	Trp	Asp	Glu	Gln	Phe	Asp	Lys	Glu	Asn	Thr	Glu	Glu	Arg
				85					90					95	
Leu	Phe	Lys	Val	Ser	Lys	Asn	Glu	Glu	Lys	Pro	Val	Gln	Met	Met	Phe
			100					105					110		
Lys	Gln	Ser	Thr	Phe	Lys	Lys	Thr	Tyr	Ile	Gly	Glu	Ile	Phe	Thr	Gln
		115					120					125			
Ile	Leu	Val	Leu	Pro	Tyr	Val	Gly	Lys	Glu	Leu	Asn	Met	Ile	Ile	Met
	130					135					140				
Leu	Pro	Asp	Glu	Thr	Thr	Asp	Leu	Arg	Thr	Val	Glu	Lys	Glu	Leu	Thr
145					150					155					160
Tyr	Glu	Lys	Phe	Val	Glu	Trp	Thr	Arg	Leu	Asp	Met	Met	Asp	Glu	Glu
				165					170					175	
Glu	Val	Glu	Val	Ser	Leu	Pro	Arg	Phe	Lys	Leu	Glu	Glu	Ser	Tyr	Asp
			180					185					190		
Met	Glu	Ser	Val	Leu	Arg	Asn	Leu	Gly	Met	Thr	Asp	Ala	Phe	Glu	Leu
		195					200					205			
Gly	Lys	Ala	Asp	Phe	Ser	Gly	Met	Ser	Gln	Thr	Asp	Leu	Ser	Leu	Ser
	210					215					220				
Lys	Val	Val	His	Lys	Ser	Phe	Val	Glu	Val	Asn	Glu	Glu	Gly	Thr	Glu
225					230					235					240
Ala	Ala	Ala	Ala	Thr	Ala	Ala	Ile	Met	Met	Met	Arg	Cys	Ala	Arg	Phe
				245					250					255	
Val	Pro	Arg	Phe	Cys	Ala	Asp	His	Pro	Phe	Leu	Phe	Phe	Ile	Gln	His
			260					265					270		

Ser Lys Thr Asn Gly Ile Leu Phe Cys Gly Arg Phe Ser Ser Pro 275 280 285

<210> 3822

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3822

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser

1 5 10 15

Gly Ala Cys Gly Asp Thr Val Met Thr Gln Ser Pro Asp Ser Leu Ala

20 25 30

Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser

35 40 45

Val Leu Ser Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln

50 55 60

Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg

65 70 75 80

Ala Ser Gly Val Pro Glu Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp

85 90 95

Phe Thr Leu Thr Ile Asp Ser Leu Gln Ala Glu Asp Val Ala Val Tyr

100 105 110

Tyr Cys Gln Gln Tyr Tyr Ser Ser Pro Gln Thr Phe Gly Gln Gly Thr

115 120 125

Lys Leu Glu Ile Lys Arg Lys Phe Phe Phe Pro Leu Ile Leu His Cys

130 135 140

Phe

<210> 3823

<211> 405

<212> PRT

<213> Homo sapiens

<400> 3823

Met Ser Ile Glu Ile Pro Ala Gly Leu Thr Glu Leu Leu Gln Gly Phe

Thr Val Glu Val Leu Arg His Gln Pro Ala Asp Leu Leu Glu Phe Ala

Leu Gln His Phe Thr Arg Leu Gln Gln Glu Asn Glu Arg Lys Gly Thr

Ala Arg Phe Gly His Glu Gly Arg Thr Trp Gly Asp Leu Gly Ala Ala

Ala Gly Gly Gly Thr Pro Ser Lys Gly Val Asn Phe Ala Glu Glu Ala

Ala Pro Ala Asp Ala Gly Ala Phe Asn Ala Pro Val Ile Asn Arg Phe

Thr Arg Arg Ala Ser Val Cys Ala Glu Ala Tyr Asn Pro Asp Glu Glu

Glu Asp Asp Ala Glu Ser Arg Ile Ile His Pro Lys Thr Asp Asp Gln

Arg Asn Arg Leu Gln Glu Ala Cys Lys Asp Ile Leu Leu Phe Lys Asn

Leu Asp Pro Glu Gln Met Ser Gln Val Leu Asp Ala Met Phe Glu Lys

Leu	Val	Lys	Asp	Gly	Glu	His	Val	Ile	Asp	Gln	Gly	Asp	Asp	Gly	Asp
				165					170					175	
Asn	Phe	Tyr	Val	Ile	Asp	Arg	Gly	Thr	Phe	Asp	Ile	Tyr	Val	Lys	Cys
			180					185					190		
Asp	Gly	Val	Gly	Arg	Cys	Val	Gly	Asn	Tyr	Asp	Asn	Arg	Gly	Ser	Phe
		195					200					205			
Gly	Glu	Leu	Ala	Leu	Met	Tyr	Asn	Thr	Pro	Arg	Ala	Ala	Thr	Ile	Thr
	210					215					220				
Ala	Thr	Ser	Pro	Gly	Ala	Leu	Trp	Gly	Leu	Asp	Arg	Val	Thr	Phe	Arg
225					230					235					240
Arg	Ile	Ile	Val	Lys	Asn	Asn	Ala	Lys	Lys	Arg	Lys	Met	Tyr	Glu	Ser
				245					250					255	
Phe	Ile	Glu	Ser	Leu	Pro	Phe	Leu	Lys	Ser	Leu	Glu	Phe	Ser	Glu	Arg
			260					265					270		
Leu	Lys	Val	Val	Asp	Val	Ile	Gly	Thr	Lys	Val	Tyr	Asn	Asp	Gly	Glu
		275					280					285			
Gln	Ile	Ile	Ala	Gln	Gly	Asp	Ser	Ala	Asp	Ser	Phe	Phe	Ile	Val	Glu
	290					295					300				
Ser	Gly	Glu	Val	Lys	Ile	Thr	Met	Lys	Arg	Lys	Gly	Lys	Ser	Glu	Val
305					310					315					320
Glu	Glu	Asn	Gly	Val	Val	Glu	Ile	Ala	Arg	Cys	Ser	Arg	Gly	Gln	Tyr
				325					330					335	
Phe	Gly	Glu	Leu	Ala	Leu	Val	Thr	Asn	Lys	Pro	Arg	Ala	Ala	Ser	Ala
			340					345					350		
His	Ala	Ile	Gly	Thr	Val	Lys	Cys	Leu	Ala	Met	Asp	Val	Gln	Ala	Phe
		355					360					365			
Glu	Arg	Leu	Leu	Gly	Pro	Cys	Met	Glu	Ile	Met	Lys	Arg	Asn	Ile	Ala
	370					375					380				
Thr	Tyr	Glu	Glu	Gln	Leu	Val	Ala	Leu	Phe	Gly	Thr	Asn	Met	Asp	Ile

385 390 395 400

Val Glu Pro Thr Ala

405

<210> 3824

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3824

Met Val Glu Leu Ala Ile Ile Gly Ser Asp Met Gln Glu Val Ile Gly

1 5 10 15

Ser Ala Ile Ala Ile Asn Leu Leu Ser Val Gly Arg Ile Pro Leu Trp

20 25 30

Gly Gly Val Leu Ile Thr Ile Ala Asp Thr Phe Val Phe Leu Phe Leu

35 40 45

Asp Lys Tyr Gly Leu Arg Lys Leu Glu Ala Phe Phe Gly Phe Leu Ile

50 55 60

Thr Ile Met Ala Leu Thr Phe Gly Tyr Glu Tyr Val Thr Val Lys Pro

65 70 75 80

Ser Gln Ser Gln Val Leu Lys Gly Met Phe Val Pro Ser Cys Ser Gly

85 90 95

Cys Arg Thr Pro Gln Ile Glu Gln Ala Val Gly Ile Val Gly Ala Val

100 105 110

Ile Met Pro His Asn Met Tyr Leu His Ser Ala Leu Val Lys Ser Arg

115 120 125

Gln Val Asn Arg Asn Asn Lys Gln Glu Val Arg Glu Ala Asn Lys Tyr

130 135 140

Phe	Phe	Ile	Glu	Ser	Cys	Ile	Ala	Leu	Phe	Val	Ser	Phe	Ile	Ile	Asn
145					150					155					160
Val	Phe	Val	Val	Ser	Val	Phe	Ala	Glu	Ala	Phe	Phe	Gly	Lys	Thr	Asn
				165					170					175	
Glu	Gln	Val	Val	Glu	Val	Cys	Thr	Asn	Thr	Ser	Ser	Pro	His	Ala	Gly
			180					185					190		
Leu	Phe	Pro	Lys	Asp	Asn	Ser	Thr	Leu	Ala	Val	Asp	Ile	Tyr	Lys	Gly
		195					200					205			
Gly	Val	Val	Leu	Gly	Cys	Tyr	Phe	Gly	Pro	Ala	Ala	Leu	Tyr	Ile	Trp
	210					215					220				
Ala	Val	Gly	Ile	Leu	Ala	Ala	Gly	Gln	Ser	Ser	Thr	Met	Thr	Gly	Thr
225					230					235					240
Tyr	Ser	Gly	Gln	Phe	Val	Met	Glu	Gly	Phe	Leu	Asn	Leu	Lys	Trp	Ser
				245					250	٠				255	
Arg	Phe	Ala	Arg	Val	Val	Leu	Thr	Arg	Ser	Ile	Ala	Ile	Ile	Pro	Thr
			260					265					270		
Leu	Leu	Val	Ala	Val	Phe	Gln	Asp	Val	Glu	His	Leu	Thr	Gly	Met	Asn
		275					280					285			
Asp	Phe	Leu	Asn	Val	Leu	Gln	Ser	Leu	Gln	Leu	Pro	Phe	Ala	Leu	Ile
	290					295					300				
Pro	Ile	Leu	Thr	Phe	Thr	Ser	Leu	Arg	Pro	Val	Met	Ser	Asp	Phe	Ala
305					310					315					320
Asn	Gly	Leu	Gly	Trp	Arg	Ile	Ala	Gly	Gly	Ile	Leu	Val	Leu	Ile	Ile
				325					330					335	
Cys	Ser	Ile	Asn	Met	Tyr	Phe	Val	Val	Val	Tyr	Val	Arg	Asp	Leu	Gly
			340					345					350		
His	Val	Ala	Leu	Tyr	Val	Val	Ala	Ala	Val	Val	Ser	Val	Ala	Tyr	Leu
		355					360					365			
Glv	Phe	Val	Phe	Tur	I Au	Clv	Trn	Gln	C176	יום [Tle	410	I ALL	Clv	Mot

370 375 380

Ser Phe Leu Asp Cys Gly His Thr Val Ser Ile Ser Lys Gly Leu Leu

385 390 395 400

Thr Glu Glu Ala Thr Arg Gly Tyr Val Lys

405 410

<210> 3825

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3825

Met Asp Gln Glu Glu Gly Leu Lys Ala Leu Asp Asn Ile Val Thr Gln

1 5 10 15

Phe Asn Ala Tyr Glu Asp Phe Leu Asp Ser Gln Ile Thr Thr Val Asp

20 25 30

Leu Tyr Tyr Leu Glu Asp Glu Thr Leu Ala Arg Gln Leu Val Glu Leu

35 40 45

Gly Tyr Arg Gly Thr Gly Glu Arg Val Lys Arg Glu Asp Phe Glu Ala

50 55 60

Arg Lys Ala Ala Ile Glu Ile Ala Arg Leu Ala Glu Arg Ala Gln Gln

65 70 75 80

Lys Thr Leu Thr Ser Ala Gly Lys Asp Leu Gln Asp Asn Phe Leu Thr

85 90 95

Ala Leu Ala Met Arg Glu Glu Asp Asn Arg Ser Gly Lys Leu Ser Ala

100 105 110

Gly Val Gln Trp His His Leu Gly Ser Leu Gln Pro Leu Pro Pro Gly

115 120 125

Phe Lys Glu Phe Ser Cys Phe Ser Leu Pro Ser Gly Trp Asp Tyr Arg 130 135 140

His Ala Pro Pro His Pro Val Arg Asp Leu Tyr Ser 145 150 155

<210> 3826

<211> 337

<212> PRT

<213> Homo sapiens

<400> 3826

Met Tyr Ala Met Asn Leu Ala Arg Tyr Lys Tyr Cys Pro Asp Ile Lys

1 5 10 15

Glu Lys Gly Leu Ser Gly Ser Pro Arg Leu Ile Leu Phe Thr Ser Ala
20 25 30

Glu Cys His Tyr Ser Met Lys Lys Ala Ala Ser Phe Leu Gly Ile Gly
35 40 45

Thr Glu Asn Val Cys Phe Val Glu Thr Asp Gly Arg Gly Lys Met Ile
50 55 60

Pro Glu Glu Leu Glu Lys Gln Val Trp Gln Ala Arg Lys Glu Gly Ala
65 70 75 80

Ala Pro Phe Leu Val Cys Ala Thr Ser Gly Thr Thr Val Leu Gly Ala 85 90 95

Phe Asp Pro Leu Asp Glu Ile Ala Asp Ile Cys Glu Arg His Ser Leu
100 105 110

Trp Leu His Val Asp Ala Ser Trp Gly Gly Ser Ala Leu Met Ser Arg 115 120 125

Lys His Arg Lys Leu Leu His Gly Ile His Arg Ala Asp Ser Val Ala

	130					135					140				
Trp	Asn	Pro	His	Lys	Met	Leu	Met	Ala	Gly	Ile	Gln	Cys	Cys	Ala	Leu
145					150					155					160
Leu	Val	Lys	Asp	Lys	Ser	Asp	Leu	Leu	Lys	Lys	Cys	Tyr	Ser	Ala	Lys
				165					170					175	
Ala	Ser	Tyr	Leu	Phe	Gln	Gln	Asp	Lys	Phe	Tyr	Asp	Val	Ser	Tyr	Asp
			180					185					190		
Thr	Gly	Asp	Lys	Ser	Ile	Gln	Cys	Ser	Arg	Arg	Pro	Asp	Ala	Phe	Lys
		195					200					205			
Phe	Trp	Met	Thr	Trp	Lys	Ala	Leu	Gly	Thr	Leu	Gly	Leu	Glu	Glu	Arg
	210					215					220				
Val	Asn	Arg	Ala	Leu	Ala	Leu	Ser	Arg	Tyr	Leu	Val	Asp	Glu	Ile	Lys
225					230					235					240
Lys	Arg	Glu	Gly	Phe	Lys	Leu	Leu	Met	Glu	Pro	Glu	Tyr	Ala	Asn	Ile
				245					250					255	
Cys	Phe	Trp	Tyr	Ile	Pro	Pro	Ser	Leu	Arg	Glu	Met	Glu	Glu	Gly	Pro
			260					265					270		
Glu	Phe	Trp	Ala	Lys	Leu	Asn	Leu	Val	Ala	Pro	Ala	Ile	Lys	Glu	Arg
		275					280					285			
Met	Met	Lys	Lys	Gly	Ser	Leu	Met	Leu	Gly	Tyr	Gln	Pro	His	Arg	Gly
	290					295					300				
Lys	Val	Asn	Phe	Phe	Arg	Gln	Val	Val	Ile	Ser	Pro	Gln	Val	Ser	Arg
305					310					315					320
Glu	Asp	Met	Asp	Phe	Leu	Leu	Asp	Glu	Ile	Asp	Leu	Leu	Gly	Lys	Asp
				325					330					335	
Met															

<210> 3827

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3827

Met Ser His Pro Ser Phe Leu Leu Phe Phe Cys Phe Phe Leu Phe Leu

1 5 10 15

Phe Phe Glu Lys Gln Phe His Ser Cys Cys Pro Asn Trp Ser Gly Val

20 25 30

Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro Pro Pro Gly Phe Lys

35 40 45

Arg Phe Ser Cys Leu Asn Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu

50 55 60

Pro Pro Arg Leu Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu

65 70 75 80

His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Arg Leu

85 90 95

Pro Gln Pro Pro Lys Val Val Gly Leu Gln Val

100 105

<210> 3828

<211> 318

<212> PRT

<213> Homo sapiens

<400> 3828

Met Ile Lys Leu Trp Thr Asn Arg Asp Leu His Ile Ile Val Met Val

1				5					10					15	
Lys	Asn	Pro	Ala	Lys	Met	Ser	Leu	Tyr	Pro	Ser	Leu	Glu	Asp	Leu	Lys
			20					25					30		
Val	Asp	Lys	Val	Ile	Gln	Ala	Gln	Thr	Ala	Phe	Ser	Ala	Asn	Pro	Ala
		35					40					45			
Asn	Pro	Ala	Ile	Leu	Ser	Glu	Ala	Ser	Ala	Pro	Ile	Pro	His	Asp	Gly
	50					55					60				
Asn	Leu	Tyr	Pro	Arg	Leu	Tyr	Pro	Glu	Leu	Ser	Gln	Tyr	Met	Gly	Leu
65					70					75					80
Ser	Leu	Asn	Glu	Glu	Glu	Ile	Arg	Ala	Asn	Val	Ala	Val	Val	Ser	Gly
				85					90					95	
Ala	Pro	Leu	Gln	Gly	Leu	Val	Ala	Arg	Pro	Ser	Ser	Ile	Asn	Tyr	Met
			100					105					110		
Val	Ala	Pro	Val	Thr	Gly	Asn	Asp	Val	Gly	Ile	Arg	Arg	Ala	Glu	Ile
		115					120					125			
Lys	Gln	Gly	Ile	Arg	Glu	Val	Ile	Leu	Cys	Lys	Asp	Gln	Asp	Gly	Lys
	130					135					140				
Ile	Gly	Leu	Arg	Leu	Lys	Ser	Ile	Asp	Asn	Gly	Ile	Phe	Val	Gln	Leu
145					150					155					160
Val	Gln	Ala	Asn	Ser	Pro	Ala	Ser	Leu	Val	Gly	Leu	Arg	Phe	Gly	Asp
				165					170					175	
Gln	Val	Leu	Gln	Ile	Asn	Gly	Glu	Asn	Cys	Ala	Gly	Trp	Ser	Ser	Asp
			180					185					190		
Lys	Ala	His	Lys	Val	Leu	Lys	Gln	Ala	Phe	Gly	Glu	Lys	Ile	Thr	Met
		195					200					205			
Thr	Ile	Arg	Asp	Arg	Pro	Phe	Glu	Arg	Thr	Ile	Thr	Met	His	Lys	Asp
	210					215					220				
Ser	Thr	Gly	His	Val	Gly	Phe	Ile	Phe	Lys	Asn	Gly	Lys	Ile	Thr	Ser
225					230					235					240

Ile Val Lys Asp Ser Ser Ala Ala Arg Asn Gly Leu Leu Thr Glu His 255 245 250 Asn Ile Cys Glu Ile Asn Gly Gln Asn Val Ile Gly Leu Lys Asp Ser 270 260 265 Gln Ile Ala Asp Ile Leu Ser Thr Ser Gly Thr Val Val Thr Ile Thr 280 285 275 Ile Met Pro Ala Phe Ile Phe Glu His Ile Ile Lys Arg Met Ala Pro 290 295 300 Ser Ile Met Lys Ser Leu Met Asp His Thr Ile Pro Glu Val

315

310

<210> 3829

305

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3829

Met Arg Gly Ser Cys Glu Arg Ser Gly Glu Asp Glu Glu Gln Lys Glu

1 5 10 15

Glu Ala Met Val Ala Cys Gly Arg Leu Ser Gly Val Pro Glu Ala Glu
20 25 30

Gln Gly Pro Glu Ala Asn Trp Asp Ser Asp Leu Glu Thr Glu Gly Thr
35 40 45

Asp Gly Leu Gly Glu Leu Val Arg Asp Thr Leu Tyr Leu Arg Ser Cys
50 55 60

Arg Ala His Ser Val Val Pro Ile Ser Cys Phe Leu Arg Gln Gly Ser 65 70 75 80

Ala Gln Glu Leu Asn Leu Arg His Arg Gly Leu Gly Pro Gln Gly Ala

Arg Ala Leu Ala Ser Ser Leu Ser Ser Asn Pro Tyr Val Lys Arg Leu
100 105 110

Asp Leu Arg Asp Asn Gly Leu Cys Gly Ala Gly Ala Glu Ala Leu Ala
115 120 125

Gly Ala Leu Ser Lys Ser Ser Ser Ile His Gly Arg Cys Trp Val Trp 130 135 140

Gly Arg Trp Ala Gly Val Ser Ser Phe Ser Ser Gly Met Cys Leu His
145 150 155 160

Arg

<210> 3830

<211> 598

<212> PRT

<213> Homo sapiens

<400> 3830

Met Asp Leu Leu His Lys Asn Met Lys His Leu Trp Phe Phe Leu Leu

1 5 10 15

Leu Val Ala Ala Pro Arg Trp Gly Leu Ser Gln Val Arg Leu Gln Gln
20 25 30

Trp Gly Thr Gly Val Leu Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys

35 40 45

Ala Val Ile Gly Gly Ser Phe Ser Asp Tyr Ser Phe Thr Trp Val Arg
50 55 60

Arg Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Glu Val Gln Arg Gly
65 70 75 80

Gly	Thr	Ser	Ile	Tyr	His	Pro	Ala	Leu	Lys	Ser	Arg	Val	Thr	He	Ser
				85					90					95	
Ile	Asp	Thr	Ser	Lys	Lys	Trp	Phe	Ser	Leu	Lys	Leu	Thr	Ser	Val	Thr
			100					105					110		
Thr	Ala	Asp	Thr	Ala	Leu	Tyr	Tyr	Cys	Ala	Ser	Gly	Gln	Ile	Arg	Asp
		115					120					125			
Leu	Trp	Gly	His	Gly	Thr	Leu	Val	Ser	Val	Ala	Pro	Ser	Pro	Thr	Lys
	130					135					140				
Ala	Pro	Asp	Val	Phe	Pro	Ile	Ile	Ser	Gly	Cys	Arg	His	Pro	Lys	Asp
145					150					155					160
Asn	Ser	Pro	Val	Val	Leu	Ala	Cys	Leu	Ile	Thr	Gly	Tyr	His	Pro	Thr
				165					170					175	
Ser	Val	Thr	Val	Thr	Trp	Tyr	Met	Gly	Thr	Gln	Ser	Gln	Pro	Gln	Arg
			180					185					190		
Thr	Phe	Pro	Glu	Ile	Gln	Arg	Arg	Asp	Ser	Tyr	Tyr	Met	Thr	Ser	Ser
		195					200					205			
Gln	Leu	Ser	Thr	Pro	Leu	Gln	Gln	Trp	Arg	Gln	Gly	Glu	Tyr	Lys	Cys
	210					215					220				
Val	Val	Gln	His	Thr	Ala	Ser	Lys	Ser	Lys	Lys	Glu	Ile	Phe	Arg	Trp
225					230					235					240
Pro	Glu	Ser	Pro	Lys	Ala	Gln	Ala	Ser	Ser	Val	Pro	Thr	Ala	Gln	Pro
				245					250					255	
Gln	Ala	Glu	Gly	Ser	Leu	Ala	Lys	Ala	Thr	Thr	Ala	Pro	Ala	Thr	Thr
			260					265					270		
Arg	Asn	Thr	Gly	Arg	Gly	Gly	Glu	Glu	Lys	Lys	Lys	Glu	Lys	Glu	Lys
		275					280					285			
Glu	Glu	Gln	Gly	Glu	Arg	Glu	Thr	Lys	Thr	Pro	Glu	Cys	Pro	Ser	His
	290					295					300				
Thr	Gln	Pro	Leu	Glv	Val	Tvr	Leu	Leu	Thr	Pro	Ala	Val	Gln	Asp	Leu

305					310					315					320
Trp	Leu	Arg	Asp	Lys	Ala	Thr	Phe	Thr	Cys	Phe	Val	Val	Gly	Ser	Asp
				325					330					335	
Leu	Lys	Asp	Ala	His	Leu	Thr	Trp	Glu	Val	Ala	Gly	Lys	Val	Pro	Thr
			340					345					350		
Gly	Gly	Val	Glu	Glu	Gly	Leu	Leu	Glu	Arg	His	Ser	Asn	Gly	Ser	Gln
		355					360					365			
Ser	Gln	His	Ser	Arg	Leu	Thr	Leu	Pro	Arg	Ser	Leu	Trp	Asn	Ala	Gly
	370					375					380				
Thr	Ser	Val	Thr	Cys	Thr	Leu	Asn	His	Pro	Ser	Leu	Pro	Pro	Gln	Arg
385					390					395					400
Leu	Met	Ala	Leu	Arg	Glu	Pro	Gly	Glu	Pro	Gly	Ser	Gln	Val	Gly	Arg
				405		÷			410					415	
Arg	Gly	Cys	Pro	Gln	Pro	Ala	Asp	Pro	Tyr	Ala	Cys	Pro	Arg	Ala	Met
			420					425					430		
Thr	Pro	Ala	Gly	Pro	Gln	Gln	His	Arg	Ser	Ser	Ser	Thr	Gly	Lys	Glu
		435					440					445			
Lys	Gly	Gly	Thr	Ser	Thr	Leu	Ala	Gly	Pro	Thr	Ser	Leu	Pro	Val	Pro
	450					455					460				
Pro	Trp	Pro	Glu	Ala	Asp	Ser	Leu	Pro	His	Leu	Pro	Ala	Ala	Ala	Gln
465					470					475					480
Ala	Pro	Val	Lys	Leu	Ser	Leu	Asn	Leu	Leu	Ala	Ser	Ser	Asp	Pro	Pro
				485					490					495	
Glu	Ala	Ala	Ser	Trp	Leu	Leu	Cys	Glu	Val	Ser	Gly	Phe	Ser	Pro	Pro
			500					505					510		
Asn	Ile	Leu	Leu	Met	Trp	Leu	Glu	Asp	Gln	Arg	Glu	Val	Asn	Thr	Ser
		515					520					525			
Gly	Phe	Ala	Pro	Ala	Arg	Pro	Pro	Pro	Gln	Pro	Gly	Ser	Thr	Thr	Phe
	530					535					540				

 Trp Ala Trp Ser Val Leu Arg Val Pro Ala Pro Pro Ser Pro Gln Pro

 545
 550
 555
 560

 Ala Thr Tyr Thr Cys Val Val Ser His Glu Asp Ser Arg Thr Leu Leu
 565
 570
 575

 Asn Ala Ser Arg Ser Leu Glu Val Ser Cys Glu Ser Pro Pro Gly Pro
 580
 585
 590

 Gly Leu Gly Arg Gly Leu
 595
 595

<210> 3831

<211> 1662

<212> PRT

<213> Homo sapiens

<400> 3831

Met Leu Leu Ser Ile Gln Arg Asn Leu Ala Ala Ala Trp Tyr Val Gln
1 5 10 15

Ile Pro Gly Met Glu Ile Lys Gly Lys Leu Lys Pro Met Gln Val Ala
20 25 30

Leu Ser Glu Asp Asp Leu Thr Val Leu Met Lys Ile Leu Leu Glu Asn
35 40 45

Leu Gly Glu Ala Ser Ser Gln Pro Ser Pro Thr Gln Ser Val Gln Glu
50 55 60

Thr Val Arg Val Arg Lys Val Asp Val Ser Ser Val Pro Asp His Leu 65 70 75 80

Lys Glu Gln Glu Asp Trp Thr Asp Ser Lys Leu Ser Met Asn Gln Ile 85 90 95

Val Ser Leu Gln Phe Asp Phe His Phe Glu Ser Leu Ser Ile Ile Leu

			100					105					110		
Tyr	Asn	Asn	Asp	Ile	Asn	Gln	Glu	Ser	Gly	Val	Ala	Phe	His	Asn	Asp
		115					120					125			
Ser	Phe	Gln	Leu	Gly	Glu	Leu	Arg	Leu	His	Leu	Met	Ala	Ser	Ser	Gly
	130					135					140				
Lys	Met	Phe	Lys	Asp	Gly	Ser	Met	Asn	Val	Ser	Val	Lys	Leu	Lys	Thr
145					150					155					160
Cys	Thr	Leu	Asp	Asp	Leu	Arg	Glu	Gly	Ile	Glu	Arg	Ala	Thr	Ser	Arg
				165					170					175	
Met	Ile	Asp	Arg	Lys	Asn	Asp	Gln	Asp	Asn	Asn	Ser	Ser	Met	Ile	Asp
			180					185					190		
Ile	Ser	Tyr	Lys	Gln	Asp	Lys	Asn	Gly	Ser	Gln	Ile	Asp	Ala	Val	Leu
		195					200					205			
Asp	Lys	Leu	Tyr	Val	Cys	Ala	Ser	Val	Glu	Phe	Leu	Met	Thr	Val	Ala
	210					215					220				
Asp	Phe	Phe	Ile	Lys	Ala	Val	Pro	Gln	Ser	Pro	Glu	Asn	Val	Ala	Lys
225					230					235					240
Glu	Thr	Gln	Ile	Leu	Pro	Arg	Gln	Thr	Ala	Thr	Gly	Lys	Val	Lys	Ile
				245					250					255	
Glu	Lys	Asp	Asp	Ser	Val	Arg	Pro	Asn	Met	Thr	Leu	Lys	Ala	Met	Ile
			260					265					270		
Thr	Asp	Pro	Gly	Val	Val	Phe	Val	Ala	Ser	Leu	Thr	Lys	Ala	Asp	Ala
		275					280					285			
Pro	Ala	Leu	Thr	Ala	Ser	Phe	Gln	Cys	Asn	Leu	Ser	Leu	Ser	Thr	Ser
	290					295					300				
Lys	Leu	Glu	Gln	Met	Met	Glu	Ala	Ser	Val	Arg	Asp	Leu	Lys	Val	Leu
305					310					315					320
Ala	Cys	Pro	Phe	Leu	Arg	Glu	Lys	Arg	Gly	Lys	Asn	Ile	Thr	Thr	Val
				325					330					335	

Leu	Gln	Pro	Arg	Ser	Leu	Phe	Met	Glu	Lys	Cys	Thr	Trp	Ala	Ser	Gly
			340					345					350		
Lys	Gln	Asn	Ile	Asn	Ile	Met	Val	Lys	Glu	Phe	Ile	Ile	Lys	Ile	Ser
		355					360			٠		365			
Pro	Ile	Ile	Leu	Asn	Thr	Val	Leu	Thr	Ile	Met	Ala	Ala	Leu	Ser	Pro
	370					375					380				
Lys	Thr	Lys	Glu	Asp	Gly	Ser	Lys	Asp	Thr	Ser	Lys	Glu	Met	Glu	Asn
385					390					395					400
Leu	Trp	Gly	Ile	Lys	Ser	Ile	Asn	Asp	Tyr	Asn	Thr	Trp	Phe	Leu	Gly
				405					410					415	
Val	Asp	Thr	Ala	Thr	Glu	Ile	Thr	Glu	Ser	Phe	Lys	Gly	Ile	Glu	His
			420					425					430		
Ser	Leu	Ile	Glu	Glu	Asn	Cys	Gly	Val	Val	Val	Glu	Ser	Ile	Gln	Val
		435					440					445			
Thr	Leu	Glu	Cys	Gly	Leu	Gly	His	Arg	Thr	Val	Pro	Leu	Leu	Leu	Ala
	450					455					460				
Glu	Ser	Lys	Phe	Ser	Gly	Asn	Ile	Lys	Asn	Trp	Thr	Ser	Leu	Met	Ala
465					470					475					480
Ala	Val	Ala	Asp	Val	Thr	Leu	Gln	Val	His	Tyr	Tyr	Asn	Glu	Ile	His
				485					490					495	
Ala	Val	Trp	Glu	Pro	Leu	Ile	Glu	Arg	Val	Glu	Gly	Lys	Arg	Gln	Trp
			500					505					510		
Asn	Leu	Arg	Leu	Asp	Val	Lys	Lys	Asn	Pro	Val	Gln	Asp	Lys	Ser	Leu
		515					520					525			
Leu	Pro	Gly	Asp	Asp	Phe	Ile	Pro	Glu	Pro	Gln	Met	Ala	Ile	His	Ιlε
	530					535					540				
Ser	Ser	Gly	Asn	Thr	Met	Asn	Ile	Thr	Ile	Ser	Lys	Ser	Cys	Leu	Asn
545					550					555					560
Val	Phe	Asn	Asn	Leu	Ala	Lys	Gly	Phe	Ser	Glu	Gly	Thr	Ala	Ser	Thr

				565					570					575		
Phe	Asp	Tyr	Ser	Leu	Lys	Asp	Arg	Ala	Pro	Phe	Thr	Val	Lys	Asn	Ala	
			580					585					590			
Val	Gly	Val	Pro	Ile	Lys	Val	Lys	Pro	Asn	Cys	Asn	Leu	Arg	Val	Met	
		595					600					605				
Gly	Phe	Pro	Glu	Lys	Ser	Asp	Ile	Phe	Asp	Val	Asp	Ala	Gly	Gln	Asn	
	610					615					620					
Leu	Glu	Leu	Glu	Tyr	Ala	Ser	Met	Val	Pro	Ser	Ser	Gln	Gly	Asn	Leu	
625					630					635					640	
Ser	Ile	Leu	Ser	Arg	Gln	Glu	Ser	Ser	Phe	Phe	Thr	Leu	Thr	Ile	Val	
				645					650	•				655		
Pro	His	Gly	Tyr	Thr	Glu	Val	Ala	Asn	Ile	Pro	Val	Ala	Arg	Pro	Gly	
			660					665					670			
Arg	Arg	Leu	Tyr	Asn	Val	Arg	Asn	Pro	Asn	Ala	Ser	His	Ser	Asp	Ser	
		675					680					685				
Val	Leu	Val	Gln	Ile	Asp	Ala	Thr	Glu	Gly	Asn	Lys	Val	Ile	Thr	Leu	
	690					695					700					
Arg	Ser	Pro	Leu	Gln	Ile	Lys	Asn	His	Phe	Ser	Ile	Ala	Phe	Ile	Ile	
705					710					715					720	
Tyr	Lys	Phe	Val	Lys	Asn	Val	Lys	Leu	Leu	Glu	Arg	Ile	Gly	Ile	Ala	
				725					730					735		
Arg	Pro	Glu	Glu	Glu	Phe	His	Val	Pro	Leu	Asp	Ser	Tyr	Arg	Cys	Gln	
			740					745					750			
Leu	Phe	Ile	Gln	Pro	Ala	Gly	Ile	Leu	Glu	His	Gln	Tyr	Lys	Glu	Ser	
		755					760					765				
Thr	Thr	Tyr	Ile	Ser	Trp	Lys	Glu	Glu	Leu	His	Arg	Ser	Arg	Glu	Val	
	770					775					780					
	Cys	Met	Leu	Gln	Cys	Pro	Ser	Val	Glu		Ser	Phe	Leu	Pro		
785					790					795					800	

Ile	Val	Asn	Thr	Val	Ala	Leu	Pro	Asp	Glu	Leu	Ser	Tyr	He	Cys	Thr
				805					810					815	
His	Gly	Glu	Asp	Trp	Asp	Val	Ala	Tyr	Ile	Ile	His	Leu	Tyr	Pro	Ser
			820					825					830		
Leu	Thr	Leu	Arg	Asn	Leu	Leu	Pro	Tyr	Ser	Leu	Arg	Tyr	Leu	Leu	Glu
		835					840					845			
Gly	Thr	Ala	Glu	Thr	His	Glu	Leu	Ala	Glu	Gly	Ser	Thr	Ala	Asp	Val
	850					855					860				
Leu	His	Ser	Arg	Ile	Ser	Gly	Glu	Ile	Met	Glu	Leu	Val	Leu	Val	Lys
865					870					875					880
Tyr	Gln	Gly	Lys	Asn	Trp	Asn	Gly	His	Phe	Arg	Ile	Arg	Asp	Thr	Leu
				885					890					895	
Pro	Glu	Phe	Phe	Pro	Val	Cys	Phe	Ser	Ser	Asp	Ser	Thr	Glu	Val	Thr
			900					905					910		
Thr	Val	Asp	Leu	Ser	Val	His	Val	Arg	Arg	Ile	Gly	Ser	Arg	Met	Val
		915					920					925			
Leu	Ser	Val	Phe	Ser	Pro	Tyr	Trp	Leu	Ile	Asn	Lys	Thr	Thr	Arg	Val
	930					935					940				
Leu	Gln	Tyr	Arg	Ser	Glu	Asp	Ile	His	Val	Lys	His	Pro	Ala	Asp	Phe
945					950					955					960
Arg	Asp	Ile	Ile	Leu	Phe	Ser	Phe	Lys	Lys	Lys	Asn	Ile	Phe	Thr	Lys
				965					970					975	
Asn	Lys	Val	Gln	Leu	Lys	Ile	Ser	Thr	Ser	Ala	Trp	Ser	Ser	Ser	Phe
			980					985					990		
Ser	Leu	Asp	Thr	Val	Gly	Ser	Tyr	Gly	Cys	Val	Lys	Cys	Pro	Ala	Asn
		995					1000					1005			
Asn	Met	Glu	Tyr	Leu	Val	Gly	Val	Ser	Ile	Lys	Met	Ser	Ser	Phe	Asn
	1010					1015					1020				
Leu	Ser	Arg	Ile	Val	Thr	Leu	Thr	Pro	Phe	Cys	Thr	Ile	Ala	Asn	Lys

1025		1030		1035			1040
Ser Ser Leu	Glu Leu	Glu Val	Gly Glu	Ile Ala	Ser Asp	Gly Ser	Met
	1045			1050		1055	
Pro Thr Asn	Lys Trp	Asn Tyr	Ile Ala	Ser Ser	Glu Cys	Leu Pro	Phe
]	1060		1065			1070	
Trp Pro Glu	Asn Leu	Ser Gly	Lys Leu	Cys Val	Arg Val	Val Gly	Cys
1075			1080		1085		
Glu Gly Ser	Ser Lys	Pro Phe	Phe Tyr	Asn Arg	Gln Asp	Asn Gly	Thr
1090		1095			1100		
Leu Leu Ser	Leu Glu	Asp Leu	Asn Gly	Gly Ile	Leu Val	Asp Val	Asn
1105		1110		1115			1120
Thr Ala Glu	His Ser	Thr Val	Ile Thr	Phe Ser	Asp Tyr	His Glu	Gly
	1125			1130		1135	
Ser Ala Pro	Ala Leu	Ile Met	Asn His	Thr Pro	Trp Asp	lle Leu	Thr
	1140		1145			1150	
Tyr Lys Gln	Ser Gly	Ser Pro	Glu Glu	Met Val	Leu Leu	Pro Arg	Gln
1155			1160		1165	•	
Ala Arg Leu	Phe Ala	Trp Ala	Asp Pro	Thr Gly	Thr Arg	Lys Leu	Thr
1170		. 1175			1180		
Trp Thr Tyr	Ala Ala	Asn Val	Gly Glu	His Asp	Leu Leu	Lys Asp	Gly
1185		1190		1195			1200
Cys Gly Gln	Phe Pro	Tyr Asp	Ala Asņ	Ile Gln	Ile His	Trp Val	Ser
	1205			1210		1215	
Phe Leu Asp	Gly Arg	Gln Arg	Val Leu	Leu Phe	Thr Asp	Asp Val	Ala
	1220		1225			1230	
Leu Val Ser	Lys Ala	Leu Gln	Ala Glu	Glu Met	Glu Gln	Ala Asp	Tyr
1235			1240		1245	•	
Glu Ile Thr	Leu Ser	Leu His	Ser Leu	Gly Leu	Ser Leu	ıVal Asn	Asn
1250		1255			1260		

Glu	Ser	Lys	Gln	Glu	Val	Ser	Tyr	Ile	Gly	He	Thr	Ser	Ser	Gly	Val
1265	ı				1270]	1275				1	280
Val	Trp	Glu	Val	Lys	Pro	Lys	Gln	Lys	Trp	Lys	Pro	Phe	Ser	Gln	Lys
				1285				-	1290					1295	
Gln	Ile	Ile	Leu	Leu	Glu	Gln	Ser	Tyr	Gln	Lys	His	Gln	Ile	Ser	Arg
			1300]	1305]	1310		
Asp	His	Gly	Trp	Ile	Lys	Leu	Asp	Asn	Asn	Phe	Glu	Val	Asn	Phe	Asp
]	1315					1320				-	1325			
Lys	Asp	Pro	Met	Glu	Met	Arg	Leu	Pro	Ile	Arg	Ser	Pro	Ile	Lys	Arg
1	330					1335]	1340				
Asp	Phe	Leu	Ser	Gly	Ile	Gln	Ile	Glu	Phe	Lys	Gln	Ser	Ser	His	Gln
1345	,				1350				-	1355				1	360
Arg	Ser	Leu	Arg	Ala	Arg	Leu	Tyr	Trp	Leu	Gln	Val	Asp	Asn	Gln	Leu
				1365				-	1370				-	1375	
Pro	Gly	Ala	Met	Phe	Pro	Val	Val	Phe	His	Pro	Val	Ala	Pro	Pro	Lys
			1380				-	1385				-	1390		
Ser	Ile	Ala	Leu	Asp	Ser	Glu	Pro	Lys	Pro	Phe	Ile	Asp	Val	Ser	Val
]	1395					1400					1405			
Ile	Thr	Arg	Phe	Asn	Glu	Tyr	Ser	Lys	Val	Leu	Gln	Phe	Lys	Tyr	Phe
1	410					1415				-	1420				
Met	Val	Leu	Ile	Gln	Glu	Met	Ala	Leu	Lys	Ile	Asp	Gln	Gly	Phe	Leu
1425	,			-	1430					1435				1	440
Gly	Ala	Ile	Ile	Ala	Leu	Phe	Thr	Pro	Thr	Thr	Asp	Pro	Glu	Ala	Glu
				1445					1450				-	1455	
Arg	Arg	Arg	Thr	Lys	Leu	Ile	Gln	Gln	Asp	Ile	Asp	Ala	Leu	Asn	Ala
		-	1460				-	1465				-	1470		
Glu	Leu	Met	Glu	Thr	Ser	Met	Thr	Asp	Met	Ser	Ile	Leu	Ser	Phe	Phe
]	1475					1480					1485			
Glu	Hic	Phe	His	Tle	Ser	Pro	Val	Ive	Len	Hie	Len	Ser	Len	Ser	Leu

1500

Gly Ser Gly Gly Glu Glu Ser Asp Lys Glu Lys Gln Glu Met Phe Ala 1505 1510 1515 Val His Ser Val Asn Leu Leu Leu Lys Ser Ile Gly Ala Thr Leu Thr 1525 1530 1535 Asp Val Asp Asp Leu Ile Phe Lys Leu Ala Tyr Tyr Glu Ile Arg Tyr 1550 1540 1545 Gln Phe Tyr Lys Arg Asp Gln Leu Ile Trp Ser Val Val Arg His Tyr 1555 1560 1565 Ser Glu Gln Phe Leu Lys Gln Met Tyr Val Leu Val Leu Gly Leu Asp 1575 1580 1570 Val Leu Gly Asn Pro Phe Gly Leu Ile Arg Gly Leu Ser Glu Gly Val 1600 1585 1590 1595

1495

Glu Phe Ala Glu Gly Leu Val Ile Gly Val Arg Ser Leu Phe Gly His

1620
1625
1630
Thr Val Gly Gly Ala Ala Gly Val Val Ser Arg Ile Thr Gly Ser Val

Glu Ala Leu Phe Tyr Glu Pro Phe Gln Gly Ala Val Gln Gly Pro Glu

1610

1635 1640 1645

1605

Gly Lys Gly Leu Ala Ala Ile Thr Met Asp Lys Glu Tyr Gln 1650 1655 1660

<210> 3832

1490

<211> 1054

<212> PRT

<213> Homo sapiens

<400> 3832

Met	Ala	Arg	Asp	Thr	Asn	Ser	Gly	Ser	Ser	Ser	Ser	Gln	Gln	Asn	Tyr
1				5					10					15	
Gly	Leu	Arg	Ala	Lys	Arg	Lys	Val	Arg	Tyr	Ser	Glu	Asp	Tyr	Leu	Tyr
			20					25					30		
Asp	Val	Asp	Ser	Leu	Glu	Gly	Glu	Lys	Val	Asn	Glu	Arg	Lys	Glu	Trp
		35					40					45			
Leu	Pro	Val	Gly	Ser	Lys	Glu	Glu	Asp	Asp	Asp	Glu	Trp	Cys	Pro	Lys
	50					55					60				
Lys	Arg	Arg	Lys	Val	Thr	Arg	Lys	Glu	Pro	Pro	Val	Ile	Ile	Lys	Tyr
65					70					75					80
Ile	Ile	Ile	Asn	Arg	Phe	Lys	Gly	Glu	Lys	Asn	Met	Leu	Val	Lys	Leu
				85					90					95	
Gly	Lys	Val	Asp	Ala	Ser	Glu	Thr	Thr	Val	Asn	Leu	Ser	Glu	Asn	Gln
			100					105					110		
Leu	Asn	Lys	Tyr	Ala	Lys	Leu	Ala	Pro	Leu	Lys	Gly	Phe	Trp	Gln	Lys
		115					120					125			
Lys	Lys	Lys	Gln	Arg	Asn	Thr	Asn	Thr	Asp	Ser	Ile	Lys	Thr	Pro	Phe
	130					135					140				
Ser	Gln	Lys	Gln	Ser	Phe	Glu	Pro	Gly	Ser	Phe	Glu	Val	Ser	Phe	Leu
145					150					155					160
Pro	Pro	Ala	Arg	Lys	Arg	Lys	Ser	Lys	Leu	Gly	Asn	Arg	His	Arg	Ile
				165					170					175	
Gln	Arg	Ile	Pro	Ser	Ile	Glu	Ile	Ser	Ala	Ser	Ser	Lys	Gln	Ile	Ser
			180					185					190		
Leu	Cys	Asn	Asp	Gln	Arg	His	Ala	Ser	Asn	His	Lys	Glu	Asp	Gly	Gly
		195					200					205			
Leu	Lys	Gly	Thr	Leu	Lys	Ser	Ala	Pro	Leu	Gly	Ala	Pro	Ser	Cys	Ala
	210					215					220				
Asn	Gly	Ser	His	Leu	Asn	Asp	Ile	Thr	Gly	Pro	Asp	Ser	Val	Lys	Val

225					230					235					240
Lys	Ala	Gln	Asp	Thr	Glu	Phe	Lys	Gly	Pro	Glu	Arg	Lys	Val	Leu	Asn
				245					250					255	
Lys	Ile	Lys	Phe	Lys	Ser	Glu	Ala	Arg	Leu	Lys	Ser	Lys	Lys	Val	Lys
			260					265					270		
Ala	Ala	Gly	Gln	Glu	Ser	Lys	Pro	Ile	Val	Gln	Met	Ser	Pro	Leu	Leu
		275					280					285			
Glu	Asn	Gln	Ser	Ser	Lys	Ala	Asn	Leu	Lys	Asn	Glu	Val	Ile	Pro	Gly
	290					295					300				
Thr	Ser	Asn	Ser	Ser	Arg	Leu	Ser	Glu	Phe	His	Glu	Ala	Lys	Ala	Ala
305					310					315					320
Lys	Ser	Ser	Thr	Phe	Leu	Pro	Thr	Thr	Cys	Ser	Ser	Glu	Met	Pro	Leu
				325					330					335	
Ser	Ser	Ala	Asn	Val	Thr	Thr	Asn	Ile	Pro	Val	Ile	Pro	Gly	Gly	Tyr
			340					345					350		
Leu	Gln	Thr	Leu	Leu	Asp	Ala	Ser	Asp	Leu	Ser	Asn	Asn	Thr	Ser	Ile
		355					360					365			
Ser	Tyr	Phe	Ser	His	His	Ser	Pro	Glu	Gln	Asn	Glu	Gly	Ser	Leu	Thr
	370					375					380				
Gln	Thr	Glu	Lys	Ser	Phe	Val	Pro	Leu	Gln	Pro	Thr	Gln	Asp	Cys	Val
385					390					395					400
Leu	Thr	Ser	Ser	Ser	Asp	Ser	Glu	Leu	Gln	Gln	Ser	Ser	His	Asn	Phe
				405					410					415	
Lys	Met	Glu	Ser	Ser	Asn	Tyr	Arg	Asn	Val	Trp	Pro	Asn	Lys	Ala	Thr
			420					425					430		
Ser	Gly	Thr	Gln	Glu	Phe	Met	Ala	Glu	Val	Ser	Arg	Glu	Ile	Ala	Pro
		435					440					445			
Thr	Gln	Ser	Ser	Glu	Phe	Gly	Ala	Ser	Gln	Val	Val	Ser	Met	Glu	Asn
	450					455					460				

Asn	Leu	Thr	Pro	Thr	Thr	Tyr	Asn	Pro	He	Cys	Leu	Asn	Ser	Gly	Gly
465					470					475					480
Ser	Asn	Cys	Asn	Lys	Val	Leu	Tyr	Asp	Ser	Met	Gln	Asp	Thr	Gln	Leu
				485					490					495	
Pro	Ser	Asp	Asp	Ser	Tyr	Gln	Leu	Cys	His	Phe	Asn	Asn	Gly	Glu	Ile
			500					505					510		
Cys	Phe	Pro	Phe	Gln	Gln	Gly	Pro	Val	Asn	Met	Asp	Asp	Gly	Arg	Leu
		515					520					525			
Phe	Ser	Phe	Asp	Ser	Met	Ala	Pro	Leu	Ser	Val	Ser	Ser	Ser	Asn	Tyr
	530					535					540				
Cys	Ser	Leu	Ser	Leu	Lys	Ser	Cys	Glu	Lys	Asp	Gly	Asp	Asp	Asp	Ile
545					550					555					560
Thr	Asp	Asp	Phe	Leu	Ala	His	Cys	Ser	Pro	Lys	Leu	Val	Ile	Gln	Gln
				565					570					575	
Ser	Ile	Asp	Glu	Ile	Ala	Pro	Leu	Lys	Glu	Ser	Thr	Asp	Leu	Leu	Asp
			580					585					590		
Ile	Ser	Asn	Phe	Thr	Pro	Asp	Lys	Phe	Arg	His	Ser	Ser	Leu	Ser	Glu
		595					600					605			
Met	Ser	Pro	Pro	Asp	Thr	Pro	Ser	Leu	Ser	Pro	Gln	Ile	Thr	Arg	Cys
	610					615					620				
Glu	Ser	Met	Lys	Thr	Leu	Gly	Thr	Leu	Lys	Gly	Phe	Gln	Glu	Gly	Val
625					630					635					640
Pro	Gly	Pro	Leu	Asp	Ser	Val	Glu	Lys	Ile	Lys	Trp	Asp	Cys	Ser	Thr
				645					650					655	
Leu	Ser	Arg	Gln	Val	Gln	Met	Glu	Asp	Gly	Phe	Thr	Leu	Asn	Asn	His
			660					665					670		
Gln	Phe	Gln	Phe	His	Met	Phe	Asn	Asp	Glu	Asp	Ser	Val	Ser	Leu	Leu
		675					680					685			
Gln	Lvs	Asn	Pro	Cvs	Leu	Ser	Thr	Phe	Asn	Asp	Pro	Ser	Glv	Gln	Ιlε

Ser Thr Asn Asn Lys Val Ser Lys Ser Arg Lys Lys Ser Ser Pro Ser Lys Ser Gly Ala Met Asn Gln Ser Ser Ser Gln Lys Asn Thr Arg Lys Lys Ser Leu Lys Gly Asn Asn Lys Gly Ile Glu Lys Pro Pro Gly Lys Asn Ser Arg Gln Val Pro Lys Ser Thr Lys Lys Gly Lys Tyr Met Ala Ala Ile Asn Gly Glu Lys Met Gln Ile Gly Ile Gly Arg Gly Gly Ser Gln Thr Asn Thr Ile Ser Ser Thr Gly Lys Thr Leu Ala Glu Cys Ile Gln His Gly Gly Pro Met Ala Ser Met Lys Met Pro Ser Gln Lys Gly Leu Ser Gly Asp Trp Ala Leu Gly Lys Glu Ser Ser Pro Gly Trp Ser Asp Met Ser Met Gly Thr Asn Thr Asn Ser Leu Leu Asp Asp Gln Arg Glu Phe Gln Glu Pro Ser Tyr Ile Leu Ser Asn Ile Ala Ser Gly Met Ala Asp Val Gln Arg Phe Met Met Ala Ser Ile Glu Pro Leu Trp Glu Pro Met Glu His His Gly Asp Pro Asn Ile Phe Tyr Ser Pro Glu Ser Asn Ser Leu Lys Leu Lys Thr Leu Lys Ile Leu Ala Gly Thr Pro Gln Glu Ser Lys Lys Ile Asn Ser Gly Ser Gln Gly Ala Thr Lys

Asn His Arg Ser Ile Lys Gly Val Ser Lys Ser Asn Gly Lys Thr Ala 940 930 935 Ile Gly Asp Pro Gly Arg Ala Asn Met Pro Gly Tyr Asn Glu Asp Ser 955 960 945 950 Arg Ser Thr Phe Phe Asp Lys Lys Tyr Ser Asn Met Ser Thr Leu Gly 965 970 975 Asn Asn Gly Pro Thr His Lys Lys Leu Tyr Arg His Lys Ser Ser Ser 990 980 985 Lys Ala Leu Arg Asp Glu Lys Cys Lys Gly Lys His Met Glu Arg Glu 995 1000 1005 Gln Val His Lys Asp Glu Ser Gly Thr Ala Ser Phe Glu Lys Leu Arg 1010 1015 1020 Asp Ser Asp Tyr Asn Leu Leu Lys Ala Glu Thr Thr Phe Trp Val Leu 1025 1030 1035 1040 Pro Val Phe Glu Glu Glu Thr Arg Ile Phe Gln Lys Asp Ile 1045 1050

<210> 3833

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3833

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly

1 5 10 15

Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg
20 25 30

Pro Gly Ala Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe

45 35 40 Lys Asp Tyr Val Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 60 50 55 Glu Trp Val Ala Val Ala Trp Asp Val Gly Ile Pro Ile His Tyr Ala 70 75 80 65 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn 85 90 95 Thr Leu Tyr Leu Gln Met Asp Ser Leu Lys Val Glu Asp Thr Ala Val 100 105 110 Tyr Tyr Cys Val Arg Asp Trp Gly Asp Asp Asp Tyr Ser Ser Lys Tyr 125 115 120 Tyr Tyr Tyr Thr Leu Asp Val Trp Gly Arg Gly Thr Thr Val Thr Val 130 140 135 Ser Ser Ser Lys Ser Gly His Phe Arg Ala Phe Ile Leu Ser 150 155 145

<210> 3834

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3834

Met Ala Ser Glu Arg Leu Pro Asn Arg Pro Ala Cys Leu Leu Val Ala

1 5 10 15

Ser Gly Ala Ala Glu Gly Val Ser Ala Gln Ser Phe Leu His Cys Phe
20 25 30

Thr Met Ala Ser Thr Ala Phe Asn Leu Gln Val Ala Thr Pro Gly Gly

35 40 45

Lys Ala Met Glu Phe Val Asp Val Thr Glu Ser Asn Ala Arg Trp Val 60 50 55 Gln Asp Phe Arg Leu Lys Ala Tyr Ala Ser Pro Ala Lys Leu Glu Ser 75 80 70 65 Ile Asp Glu Pro Ile Cys Ala Val Gly His Gly Val Ala Ala Leu Cys 85 90 95 Cys Ala Thr Asn Glu Asp Arg Ser Trp Val Phe Asp Ser Tyr Ser Leu 100 105 110 Thr Gly Gly Leu Gly Leu Ser Gln Glu Pro Pro Pro Arg Ser Arg Ser 125 115 120 Pro Leu Cys Val Ser Ser Ser Gly Pro Pro Ala Ser Pro Ala Cys Arg 130 135 140 Ser Trp Trp Arg Thr Ser 145 150 <210> 3835

<211> 568

<212> PRT

<213> Homo sapiens

<400> 3835

Met Ala Gln Val Asp Ser Gln Asp Arg Trp Gly Glu Ala Ser Pro Leu

1 5 10 15

Ser Ser Leu Thr Glu Glu Ala His Asp Thr Gln Met Leu Ser Met Asn 20 25 30

Leu Glu Ser Asp Asp Glu Asp Gly Gly Glu Ala Glu Lys Glu Gly Thr
35 40 45

Ala Asp Pro Val Ala Cys Pro Arg Gly Ser Ser Pro Val Thr His Glu

	50					55					60				
Asn	Pro	Asp	Leu	Pro	Trp	Pro	His	Pro	Leu	Gly	Lys	Glu	Glu	Glu	Lys
65					70					75					80
Phe	Ser	Asp	Ser	Ser	Ser	Ala	Gly	Gly	Met	Gly	Gln	Lys	Pro	Val	Glu
				85					90					95	
Met	Ser	Gly	Lys	Ala	Ser	Trp	Ser	Arg	Asp	Val	Thr	Lys	Ile	Asn	Glu
			100					105					110		
Thr	Gln	Gly	Ser	Pro	Gly	Ala	Ser	Arg	Ala	Leu	Gly	Ser	Leu	Pro	Ser
		115					120					125			
Gly	Leu	Ala	His	Lys	Leu	Leu	Gly	Gln	Met	Gln	Pro	Leu	Gly	Asp	Arg
	130					135					140				
Leu	Pro	Ala	Gly	Asp	Asp	Gly	Tyr	Ser	Gly	Ala	Asn	Gln	Asp	Ala	Val
145					150					155					160
Leu	Asp	Val	Pro	Pro	Ser	Phe	Pro	Ser	Asn	Gly	Lys	Tyr	Leu	Cys	Ala
				165					170					175	
His	Lys	Ser	Val	Asp	Thr	Ser	Ala	Gly	Asn	Ser	Ser	Leu	Leu	Cys	Phe
			180					185					190		
Pro	Arg	Pro	Gly	Ser	Asn	Trp	Asp	Leu	Pro	Thr	Gln	Glu	Thr	His	Thr
		195					200					205			
Pro	Ala	Gln	Ala	Ser	Ala	Thr	Pro	Ala	Ser	Leu	Ala	Ala	Ala	Val	Leu
	210					215					220				
Ala	Lys	Ala	Arg	Asn	Ser	Arg	Lys	Val	Gln	Asn	Gln	Ala	Gly	Arg	Arg
225					230					235					240
Glu	Gly	Gly	Glu	Ala	Glu	Ala	Arg	Pro	Tyr	Arg	Cys	Leu	Arg	Gly	Gly
				245					250					255	
Arg	Ala	Phe	Gln	Lys	Pro	Ser	Lys	Pro	Leu	Ser	Pro	Ala	Glu	Thr	Arg
			260					265					270		
Gly	Gly	Ala	Ala	Lys	Arg	Tyr	Ala	Cys	Glu	Leu	Cys	Gly	Lys	Ala	Tyr
		275					280					285			

Ser	His	Arg	Gly	Thr	Leu	Gln	Gln	His	Arg	Arg	Leu	His	Thr	Gly	Glu
	290					295					300				
Arg	Pro	Tyr	Gln	Cys	Ser	Phe	Cys	Asp	Lys	Ala	Tyr	Thr	Trp	Ser	Ser
305					310					315					320
Asp	His	Arg	Lys	His	Ile	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro
				325					330					335	
Cys	Pro	Asp	Cys	Gly	Lys	Ala	Phe	Val	Arg	Ser	Ser	Asp	Leu	Arg	Lys
			340					345					350		
His	Gln	Arg	Asn	Met	His	Ser	Asn	Asn	Lys	Pro	Phe	Pro	Cys	Ser	Glu
		355					360					365			
Cys	Gly	Leu	Thr	Phe	Asn	Lys	Pro	Leu	Ser	Leu	Leu	Arg	His	Gln	Arg
	370					375					380				
Thr	His	Leu	Gly	Ala	Lys	Pro	Phe	Arg	Cys	Pro	Ala	Cys	Asp	Arg	Glu
385					390					395					400
Phe	Ala	Val	Ala	Ser	Arg	Met	Val	Glu	His	Gln	Arg	Val	His	Ser	Gly
				405					410					415	
Glu	Arg	Pro	Phe	Pro	Cys	Pro	Thr	Cys	Gly	Lys	Cys	Phe	Thr	Lys	Ser
			420					425					430		
Ser	Asn	Leu	Ser	Glu	His	Gln	Thr	Leu	His	Thr	Gly	Gln	Arg	Pro	Phe
		435					440					445			
Lys	Cys	Ala	Asp	Cys	Gly	Val	Ala	Phe	Ala	Gln	Pro	Ser	Arg	Leu	Val
	450					455					460				
Arg	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Arg	Pro	Phe	Pro	Cys	Thr	Glr
465					470					475					480
Cys	Gly	Gln	Ala	Phe	Ala	Arg	Ser	Ser	Thr	Leu	Lys	Arg	His	Gln	Glr
				485					490					495	
Ile	His	Ser	Gly	Glu	Lys	Gly	Phe	Leu	Cys	Ala	Glu	Cys	Gly	Arg	Ala
			500					505					510		
Phe	Arg	Ile	Ala	Ser	Glu	Leu	Ala	Gln	His	Ile	Arg	Met	His	Asn	Gly

515 520 525 Glu Arg Pro Tyr Gln Cys Glu Asp Cys Gly Gln Ala Phe Thr Arg Ser 530 535 540 Asn His Leu Gln Arg His Arg Ala Lys His Gly Thr Cys Lys Lys Glu 545 550 555 560 Pro Ile Pro Ser Ser Ser Asp Glu 565 <210> 3836 <211> 115 <212> PRT <213> Homo sapiens

Met Glu Leu Leu Arg Cys Lys Lys Phe Phe Ile Phe Leu Phe Leu Asn

1 5 10 15

Phe Tyr Leu Arg Gln Gly Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser

20 25 30

<400> 3836

Gly Ala Ile Met Ala Arg Cys Gly Leu Asp Phe Leu Gly Ser Gly Val
35 40 45

Pro Pro Ile Ser Ala Ser Gln Val Ala Gly Ala Val Gly Ala Asp His
50 55 60

Asn Ala Trp Leu Ile Phe Tyr Phe Leu Phe Phe Leu Ser Arg Arg Val
65 70 75 80

Ser Leu Cys Cys Ser Gly Trp Ser Gln Thr Pro Lys Leu Lys Arg Ser 85 90 95

Ser Phe Leu Asp Leu Pro Lys Cys Trp Asp Cys Arg His Glu Pro Pro 100 105 110 Cys Leu Ala

115

<210> 3837

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3837

Met Trp Pro Ala Trp His Arg Cys Gly Ser His Trp Gln Glu Pro Ala

1 5 10 15

Pro Ala His Ala Leu His Ser Cys Gly Glu Leu Thr Ala Arg Pro Gly

20 25 30

Gly Ala Arg Gly Ala Gln Arg Pro Arg Ser Pro Leu Leu Arg Arg Ala

35 40 45

His Ser Gln Ala Lys Gly Arg Thr Trp Gly Pro Thr Pro Thr Leu Pro

50 55 60

Thr Pro Ala Glu Ser Ser Gln Pro Gly Gln Gly Ala His Val Gly Pro

65 70 75 80

Asn Ala His Thr Pro His Ser Cys Gly Glu Leu Thr Ala Arg Pro Arg

85 90 95

Gly Ala Arg Gly Ala Gln Arg Pro Arg Ser Pro Leu Leu Arg Arg Ala

100 105 110

His Ser Gln Ala Arg Gly Arg Thr Trp Gly Pro Thr Pro Thr Leu Pro

115 120 125

Thr Pro Ala Glu Ser Ser Gln Pro Gly Gln Gly Ala His Val Gly Pro

130 135 140

Asn Ala His Ala Pro His Ser Cys Gly Glu Leu Thr Ala Arg Pro Gly

145 155 160 150 Gly Ala Arg Gly Ala Gln Arg Pro His Ser Pro Leu Leu Arg Arg Ala 170 165 175 His Ser Gln Ala Arg Gly Arg Thr Trp Gly Pro Thr Phe Arg Asn Lys 180 185 190 Val Ile Val Tyr Ser Phe Leu Phe Phe Leu Lys Ser Val Phe Leu Leu 200 205 195 Arg Thr Pro Asp Val Cys Gly Ser Glu Ala Gln Trp Ala Tyr Ser Tyr 210 215 220 Leu Thr Trp Gln Thr Trp Lys Trp Lys Leu Leu Cys Ile Thr Arg Ile 225 230 235 240 Ser Arg Ala Ser Ala Ser Cys Trp Pro Asp Arg Val Pro 245 250

<210> 3838

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3838

Met Lys Ser Phe Ile Thr Pro Gly Met Leu Asn Ser Pro Thr Leu Cys

1 5 10 15

Gln His Phe Val Gly Lys Ala Leu Lys Glu Pro Arg Asn Met Phe Ser

20 25 30

Thr Thr Tyr Ile Ile His Tyr Met Asp Asn Ile Val Leu Ala Thr Pro

35 40 45

Thr Asp Gln Val Leu Tyr Gln Leu Phe Arg Glu Ile Lys Trp Ala Leu

50 55 60

Thr Lys Trp Asn Leu Lys Ile Ala Pro Glu Lys Val Gln Thr Thr Ser 65 70 75 80 Ser Tyr Gln Tyr Leu Asp Thr Thr Val Thr Glu Lys Ser Ile Gln Pro 90 85 95 Gln Lys Val Ala Leu Arg Lys Asn Lys Leu Gln Thr Leu Asn Asn Leu 100 105 110 Gly Asp Ile Asn Trp Leu Arg Pro Met Leu Gly Ile Ala Ser Tyr Gln 120 125 115 Leu Thr His Val Tyr Gln Thr Leu Gln Gly Asp Ser Ser Leu Asp Ser 130 135 140 Pro Arg Gln Leu Thr Lys Glu Ala Glu Ala Glu Leu Gln Leu Val Glu 145 150 155 160 Arg Cys Phe Ser Asn Asp Met Pro Pro Gly Tyr Asn His Lys Ser Leu 170 165 175 Trp Phe Cys Leu Phe Phe Leu Pro Pro Ile Leu His Gln Asp Phe 180 185 190

<210> 3839

<211> 537

<212> PRT

<213> Homo sapiens

<400> 3839

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly

1 5 10 15

Val Gln Cys Gln Val Pro Leu Val Glu Ser Gly Gly Gly Val Val Gln

20 25 30

Pro Gly Lys Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Phe

		35					40					45			
Arg	Asn	Asn	Ala	Phe	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
	50					55					60				
Glu	Trp	Val	Ala	Leu	Ile	Ser	Asp	Asp	Ala	Asn	Glu	Glu	Phe	Tyr	Ala
65					70					75					80
Asp	Ser	Val	Arg	Gly	Arg	Phe	Ile	Ile	Ser	Arg	Asp	Asn	Ser	Asn	Asn
				85					90					95	
Arg	Leu	Tyr	Leu	Gln	Met	Asn	Gly	Leu	Arg	Pro	Glu	Asp	Ser	Ala	Val
			100					105					110		
Tyr	Phe	Cys	Ala	Arg	Asp	Val	Arg	Asn	Leu	Phe	Leu	Val	Thr	Pro	Arg
		115					120					125			
Glu	Asp	Phe	Phe	Tyr	Phe	Tyr	Gly	Leu	Asp	Val	Trp	Gly	Gln	Gly	Thr
	130					135					140				
Thr	Val	Ser	Ile	Ser	Ala	Pro	Thr	Lys	Ala	Pro	Asp	Val	Phe	Pro	Ile
145					150					155					160
Ile	Ser	Gly	Cys	Arg	His	Pro	Lys	Asp	Asn	Ser	Pro	Val	Val	Leu	Ala
				165					170					175	
Cys	Leu	Ile	Thr	Gly	Tyr	His	Pro	Thr	Ser	Val	Thr	Val	Thr	Trp	Tyr
			180					185					190		
Met	Gly	Thr	Gln	Ser	Gln	Pro	Gln	Arg	Thr	Phe	Pro	Glu	Ile	Gln	Arg
		195					200					205			
Arg	Asp	Ser	Tyr	Tyr	Met	Thr	Ser	Ser	Gln	Leu	Ser	Thr	Pro	Leu	Gln
	210					215					220				
Gln	Trp	Arg	Gln	Gly	Glu	Tyr	Lys	Cys	Val	Val	Gln	His	Thr	Ala	Ser
225					230					235					240
Lys	Ser	Lys	Lys	Glu	Ile	Phe	Arg	Trp	Pro	Glu	Ser	Pro	Lys	Ala	Gln
				245					250					255	
Ala	Ser	Ser	Val	Pro	Thr	Ala	Gln	Pro	Gln	Ala	Glu	Gly	Ser	Leu	Ala
			260					265					270		

Lys	Ala	Thr	Thr	Ala	Pro	Ala	Thr	Thr	Arg	Asn	Thr	Gly	Arg	Gly	Gly
		275					280					285			
Glu	Glu	Lys	Lys	Lys	Glu	Lys	Glu	Lys	Glu	Glu	Gln	Glu	Glu	Arg	Glu
	290					295					300				
Thr	Lys	Thr	Pro	Glu	Cys	Pro	Ser	His	Thr	Gln	Pro	Leu	Gly	Val	Tyr
305					310					315					320
Leu	Leu	Thr	Pro	Ala	Val	Gln	Asp	Leu	Trp	Leu	Arg	Asp	Lys	Ala	Thr
				325					330					335	
Phe	Thr	Cys	Phe	Val	Val	Gly	Ser	Asp	Leu	Lys	Asp	Ala	His	Leu	Thr
			340					345					350		
Trp	Glu	Val	Ala	Gly	Lys	Val	Pro	Thr	Gly	Gly	Val	Glu	Glu	Gly	Leu
		355					360					365			
Leu	Glu	Arg	His	Ser	Asn	Gly	Ser	Gln	Ser	Gln	His	Ser	Arg	Leu	Thr
	370					375					380				
Leu	Pro	Arg	Ser	Leu	Trp	Asn	Ala	Gly	Thr	Ser	Val	Thr	Cys	Thr	Leu
385					390					395					400
Asn	His	Pro	Ser	Leu	Pro	Pro	Gln	Arg	Leu	Met	Ala	Leu	Arg	Glu	Pro
				405					410					415	
Ala	Ala	Gln	Ala	Pro	Val	Lys	Leu	Ser	Leu	Asn	Leu	Leu	Ala	Ser	Ser
			420					425					430		
Asp	Pro	Pro	Glu	Ala	Ala	Ser	Trp	Leu	Leu	Cys	Glu	Val	Ser	Gly	Phe
		435					440					445			
Ser	Pro	Pro	Asn	Ile	Leu	Leu	Met	Trp	Leu	Gly	Asp	Gln	Arg	Glu	Val
	450					455					460				
Asn	Thr	Ser	Gly	Phe	Ala	Pro	Ala	Arg	Pro	Pro	Pro	Gln	Pro	Arg	Ser
465					470					475					480
Thr	Thr	Phe	Trp	Ala	Trp	Ser	Val	Leu	Arg	Val	Pro	Ala	Pro	Pro	Ser
				485					490					495	
Pro	Gln	Pro	Ala	Thr	Tyr	Thr	Cys	Val	Val	Ser	His	Glu	Asp	Ser	Arg

500 505 510

Thr Leu Leu Asn Ala Ser Arg Ser Leu Glu Val Ser Cys Glu Ser Pro

515 520 525

Pro Gly Pro Gly Leu Gly Arg Gly Leu

530 535

<210> 3840

<211> 965

<212> PRT

<213> Homo sapiens

<400> 3840

Met Ile Ile Pro Ser Leu Asp Gly Ala Leu Phe Gln Trp Asp Arg Asp

1 5 10 15

Arg Glu Ser Met Glu Thr Val Pro Phe Thr Val Glu Ser Leu Leu Glu

20 25 30

Ser Ser Tyr Lys Phe Gly Asp Asp Val Val Leu Val Gly Gly Lys Ser

35 40 45

Leu Thr Thr Tyr Gly Leu Ser Ala Tyr Ser Gly Lys Val Arg Tyr Ile

50 55 60

Cys Ser Ala Leu Gly Cys Arg Gln Trp Asp Ser Asp Glu Met Glu Gln

65 70 75 80

Glu Glu Asp Ile Leu Leu Gln Arg Thr Gln Lys Thr Val Arg Ala

85 90 95

Val Gly Pro Arg Ser Gly Asn Glu Lys Trp Asn Phe Ser Val Gly His

100 105 110

Phe Glu Leu Arg Tyr Ile Pro Asp Met Glu Thr Arg Ala Gly Phe Ile

115 120 125

Glu	Ser	Thr	Phe	Lys	Pro	Asn	Glu	Asn	Thr	Glu	Glu	Ser	Lys	Ile	Ile
	130					135					140				
Ser	Asp	Val	Glu	Glu	Gln	Glu	Ala	Ala	Ile	Met	Asp	Ile	Val	Ile	Lys
145					150					155					160
Val	Ser	Val	Ala	Asp	Trp	Lys	Val	Met	Ala	Phe	Ser	Lys	Lys	Gly	Gly
				165					170		٠			175	
His	Leu	Glu	Trp	Glu	Tyr	Gln	Phe	Cys	Thr	Pro	Ile	Ala	Ser	Ala	Trp
			180					185					190		
Leu	Leu	Lys	Asp	Gly	Lys	Val	Ile	Pro	Ile	Ser	Leu	Phe	Asp	Asp	Thr
		195					200					205			
Ser	Tyr	Thr	Ser	Asn	Asp	Asp	Val	Leu	Glu	Asp	Glu	Glu	Asp	Ile	Val
	210					215					220				•
Glu	Ala	Ala	Arg	Gly	Ala	Thr	Glu	Asn	Ser	Val	Tyr	Leu	Gly	Met	Tyr
225					230					235					240
Arg	Gly	Gln	Leu	Tyr	Leu	Gln	Ser	Ser	Val	Arg	Ile	Ser	Glu	Lys	Phe
				245					250					255	
Pro	Ser	Ser	Pro	Lys	Ala	Leu	Glu	Ser	Val	Thr	Asn	Glu	Asn	Ala	Ile
			260					265					270		
Ile	Pro	Leu	Pro	Thr	Ile	Lys	Trp	Lys	Pro	Leu	Ile	His	Ser	Pro	Ser
		275					280					285			
Arg	Thr	Pro	Val	Leu	Val	Gly	Ser	Asp	Glu	Phe	Asp	Lys	Cys	Leu	Ser
	290					295					300				
Asn	Asp	Lys	Phe	Ser	His	Glu	Glu	Tyr	Ser	Asn	Gly	Ala	Leu	Ser	Ile
305					310					315					320
Leu	Gln	Tyr	Pro	Tyr	Asp	Asn	Gly	Tyr	Tyr	Leu	Pro	Tyr	Tyr	Lys	Arg
				325					330					335	
Glu	Arg	Asn	Lys	Arg	Ser	Thr	Gln	Ile	Thr	Val	Arg	Phe	Leu	Asp	Asn
			340					345					350		
Pro	His	Tvr	Asn	Lvs	Asn	Ile	Arg	Lvs	Lvs	Asp	Pro	Val	Leu	Leu	Leu

His Trp Trp Lys Glu Ile Val Ala Thr Ile Leu Phe Cys Ile Ile Ala Thr Thr Phe Ile Val Arg Arg Leu Phe His Pro His Pro His Arg Gln Arg Lys Glu Ser Glu Thr Gln Cys Gln Thr Glu Asn Lys Tyr Asp Ser Val Ser Gly Glu Ala Asn Asp Ser Ser Trp Asn Asp Ile Lys Asn Ser Gly Tyr Ile Ser Arg Tyr Leu Thr Asp Phe Glu Pro Ile Gln Cys Leu Gly Arg Gly Gly Phe Gly Val Val Phe Glu Ala Lys Asn Lys Val Asp Asp Cys Asn Tyr Ala Ile Lys Arg Ile Arg Leu Pro Asn Arg Glu Leu Ala Arg Glu Lys Val Met Arg Glu Val Lys Ala Leu Ala Lys Leu Glu His Pro Gly Ile Val Arg Tyr Phe Asn Ala Trp Leu Glu Ala Pro Pro Glu Lys Trp Gln Glu Lys Met Asp Glu Ile Trp Leu Lys Asp Glu Ser Thr Asp Trp Pro Leu Ser Ser Pro Ser Pro Met Asp Ala Pro Ser Val Lys Ile Arg Arg Met Asp Pro Phe Ser Thr Lys Glu His Ile Glu Ile Ile Ala Pro Ser Pro Gln Arg Ser Arg Ser Phe Ser Val Gly Ile Ser Cys Asp Gln Thr Ser Ser Ser Glu Ser Gln Phe Ser Pro Leu Glu Phe



Ser	Gly	Met	Asp	His	Glu	Asp	Ile	Ser	Glu	Ser	Val	Asp	Ala	Ala	Tyr
		595					600					605			
Asn	Leu	Gln	Asp	Ser	Cys	Leu	Thr	Asp	Cys	Asp	Val	Glu	Asp	Gly	Thr
	610					615					620				
Met	Asp	Gly	Asn	Asp	Glu	Gly	His	Ser	Phe	Glu	Leu	Cys	Pro	Ser	Glu
625					630					635					640
Ala	Ser	Pro	Tyr	Val	Arg	Ser	Arg	Glu	Arg	Thr	Ser	Ser	Ser	Ile	Val
				645					650					655	
Phe	Glu	Asp	Ser	Gly	Cys	Asp	Asn	Ala	Ser	Ser	Lys	Glu	Glu	Pro	Lys
			660					665					670		
Thr	Asn	Arg	Leu	His	Ile	Gly	Asn	His	Cys	Ala	Asn	Lys	Leu	Thr	Ala
		675					680					685			
Phe	Lys	Pro	Thr	Ser	Ser	Lys	Ser	Ser	Ser	Glu	Ala	Thr	Leu	Ser	Ile
	690					695					700				
Ser	Pro	Pro	Arg	Pro	Thr	Thr	Leu	Ser	Leu	Asp	Leu	Thr	Lys	Asn	Thr
705					710					715					720
Thr	Glu	Lys	Leu	Gln	Pro	Ser	Ser	Pro	Lys	Val	Tyr	Leu	Tyr	Ile	Gln
				725					730					735	
Met	Gln	Leu	Cys	Arg	Lys	Glu	Asn	Leu	Lys	Asp	Trp	Met	Asn	Gly	Arg
			740					745					750		
Cys	Thr	Ile	Glu	Glu	Arg	Glu	Arg	Ser	Val	Cys	Leu	His	Ile	Phe	Leu
		755					760					765			
Gln	Ile	Ala	Glu	Ala	Val	Glu	Phe	Leu	His	Ser	Lys	Gly	Leu	Met	His
	770					775					780				
Arg	Asp	Leu	Lys	Pro	Ser	Asn	Ile	Phe	Phe	Thr	Met	Asp	Asp	Val	Val
785					790					795					800
Lys	Val	Gly	Asp	Phe	Gly	Leu	Val	Thr	Ala	Met	Asp	Gln	Asp	Glu	Glu
				805					810					815	
Glu	Gln	Thr	Val	Leu	Thr	Pro	Met	Pro	Ala	Tyr	Ala	Arg	His	Thr	Gly

U

820 825 830

Gln Val Gly Thr Lys Leu Tyr Met Ser Pro Glu Gln Ile His Gly Asn 835 840 845

Ser Tyr Ser His Lys Val Asp Ile Phe Ser Leu Gly Leu Ile Leu Phe 850 855 860

Glu Leu Leu Tyr Pro Phe Ser Thr Gln Met Glu Arg Val Arg Thr Leu 865 870 875 880

Thr Asp Val Arg Asn Leu Lys Phe Pro Pro Leu Phe Thr Gln Lys Tyr 885 890 895

Pro Cys Glu Tyr Val Met Val Gln Asp Met Leu Ser Pro Ser Pro Met
900 905 910

Glu Arg Pro Glu Ala Ile Asn Ile Ile Glu Asn Ala Val Phe Glu Asp 915 920 925

Leu Asp Phe Pro Gly Lys Thr Val Leu Arg Gln Arg Ser Arg Ser Leu 930 935 940

Ser Ser Ser Gly Thr Lys His Ser Arg Gln Ser Asn Asn Ser His Ser 945 950 955 960

Pro Leu Pro Ser Asn

965

<210> 3841

<211> 453

<212> PRT

<213> Homo sapiens

<400> 3841

Met Glu Thr Arg Gly Pro Gly Leu Ala Val Arg Ala Glu Ser Arg Arg

1 5 10 15